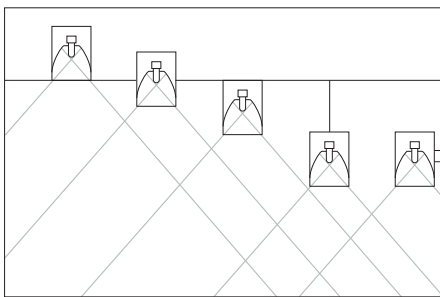
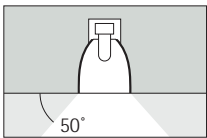
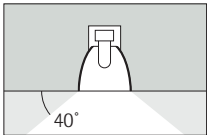
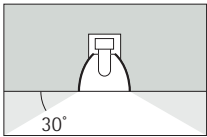
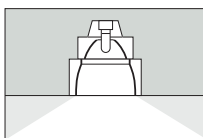


Different reflector shapes produce different cut-off angles from the same ceiling aperture.

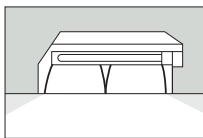
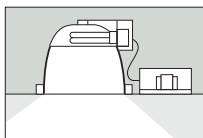
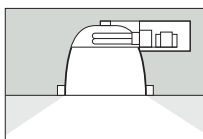


Mounting options for downlights: recessed, semi-recessed, surface, pendant and wall mounting.

Recessed downlight for high-pressure discharge lamps. Lamp and reflector are separated by a safety glass cover.

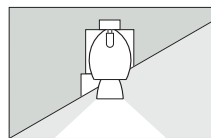
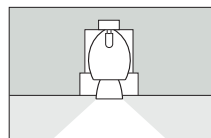
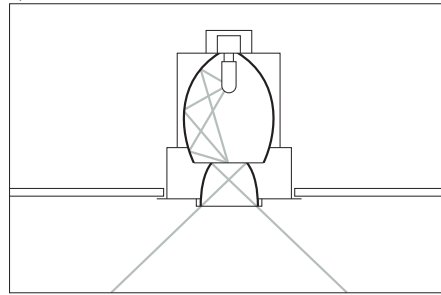


Recessed downlights for compact fluorescent lamps, versions with integrated and separate control gear (above) and with cross-blade louvre (below).



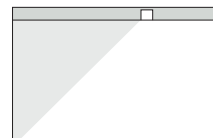
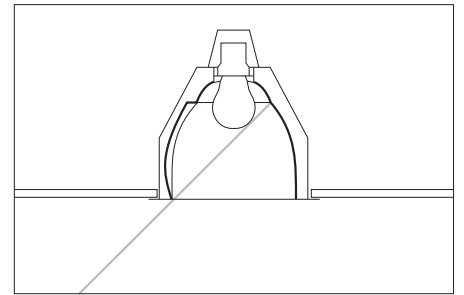
Double-focus downlights have similar properties to conventional downlights, but the special form of the reflector allows high luminous efficiency even though the ceiling aperture is small.

Double-focus downlight with ellipsoidal reflector and additional parabolic reflector with especially small ceiling aperture.

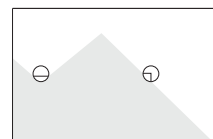
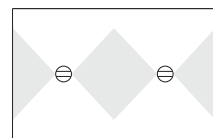
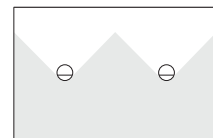


Installation of double-focus downlights in horizontal and inclined ceilings.

Washlights have asymmetrical lighting distribution, which not only directs the light vertically downwards, but also directly onto vertical surfaces. They are used to achieve uniform illumination over wall surfaces as a complement to horizontal lighting. Depending on the type used washlights are designed to illuminate a section of a wall, the corner of a space or two opposite sections of wall.

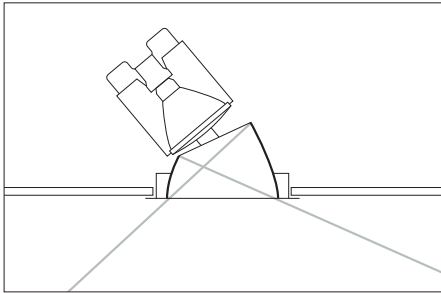


Washlights with dark-light reflectors and additional ellipsoidal segment for the wall lighting.

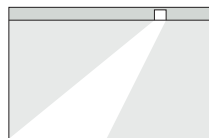
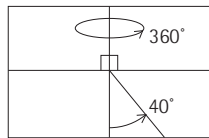


Symbolic representation in plan view: washlights, double washlights and corner washlights.

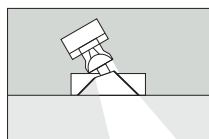
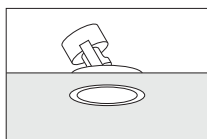
Directional spotlights provide accent lighting of specific areas or objects. By redirecting the light beam they can be used for different lighting tasks. Their light distribution is narrow to medium.



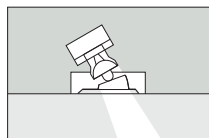
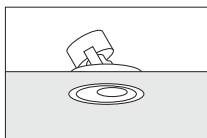
Directional spotlight with adjustable reflector lamp and darklight reflector. Directional spotlights can generally be rotated 360° and inclined to 40°. This means that the directional spotlight can be directed at both horizontal and vertical surfaces.



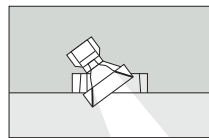
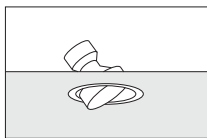
Directional spotlight with darklight reflector.



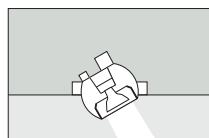
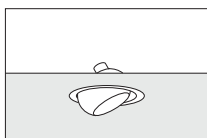
Directional spotlight with anti-dazzle mask.



Directional spotlight with cardanic suspension.



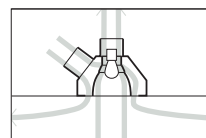
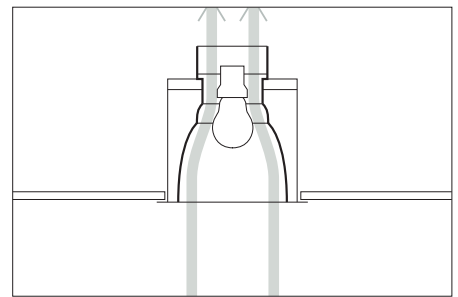
Directional spotlight, spherical version.



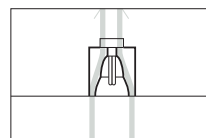
Air-handling downlights are available as air-return and air-handling luminaires. They represent a dual function solution comprising lighting and air-conditioning and make for harmonious ceiling design. Air-handling luminaires can be provided with connections for fresh air supply, for air return or for both air-supply and air-return.

Downlights are available for a wide range of lamps. Those most frequently used are compact light sources such as incandescent lamps, halogen lamps, high-pressure discharge lamps and compact fluorescent lamps.

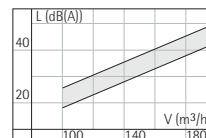
Air-handling downlight designed for an incandescent lamp. The convection heat produced by the lamp is removed with the air flow.



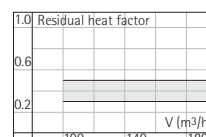
Downlight with combined air-supply and air-return.



Downlight with air-return function, designed for a compact fluorescent lamp. The return air is dissipated separately, because the cooling effect of the return air may influence the performance of the light source.



Noise level range L in relation to volume of return air flow V. Typical values for downlights.



Residual heat factor in relation to volume of return air flow V. Typical values for downlights.