

FLEX WALL WASH | DESIGN GUIDE

Design recommendations for optimum vertical illumination



Wall washing and vertical illumination are not mere decorative choices; they are essential elements of successful interior design that affect how we interact with our environments. By incorporating these lighting techniques, we can transform spaces, enhance functionality, and evoke desired emotional responses, making any setting more dynamic and engaging. Investing in effective wall washing not only beautifies a space but also significantly improves its usability and enhances the overall experience for everyone who enters.



Create a focal point

By strategically employing wall washing and vertical illumination, we can set the desired atmosphere for any occasion. Warm, inviting washes create a feeling of comfort and relaxation while bright, focused vertical light can energise and highlight, creating a focal point



Creates an impression of brightness

Vertical surfaces appear up to five times brighter than horizontal surfaces and can be used to lift the perceived brightness of a space. Vertical surfaces also provide the perfect opportunity to be used as reflective surfaces to create soft, diffuse reflected illumination.



Create dimension and space

When light is directed upwards or downwards along vertical surfaces, it creates visual interest and enhances the perception of space. This technique can elongate a room, make ceilings feel higher, and create a more inviting and spacious environment, effectively altering the way we experience a space.



Increase visual comfort

Good vertical illumination reduces glare on screens and promotes a comfortable work environment reducing visual fatigue. Soft, diffuse light along walls can help minimise eye strain, boosting productivity.

FLEX wall wash luminaires

Flex 70 Recessed



The ideal choice if flexibility of mounting or positioning is not a concern, the Flex 70 Recessed downlight provides a discreet luminaire choice from 8W - 20W.

Flex 70 Downlight for track



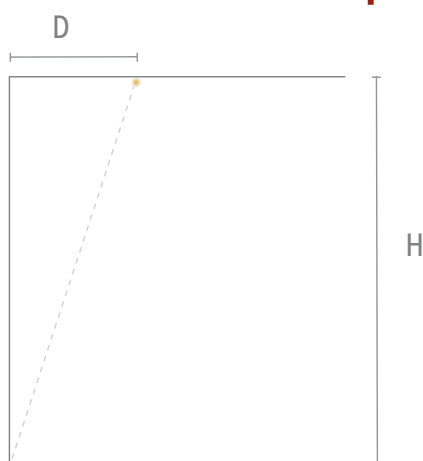
The perfect solution to provide the greatest flexibility in your wall washing. The Flex 70 downlight for track allows luminaires to be moved along the track to adjust spacing should it not be possible to achieve optimum offset or spacing ratios due to on site conditions. The Flex 70 downlight for track is only 130mm high ensuring the luminaire can still achieve high illuminance levels close to the ceiling on the wall. Available in 8W - 14W

Flex 70 Trackspot



The Flex 70 Trackspot is the perfect choice for installations that require track mounting and a higher output to achieve higher lux levels at greater mounting heights. The 70 Trackspot also provides additional flexibility though tilt to ensure optimum results if offset and spacing ratios can not be met due to on site conditions. Available in 8W - 18W

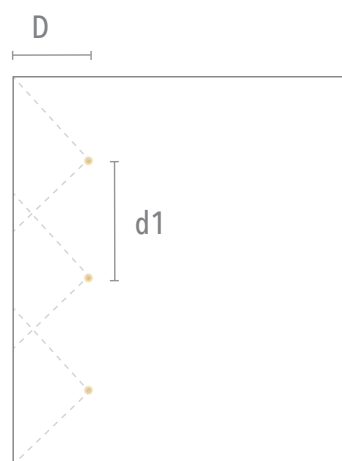
Best Practice Spacing & Placement Guide



Vertical Illumination

For uniform vertical illumination, wall washers should have a setback (d1) from the wall of 0.3 times the height of your room (h)

Offset distance: $D = 0.3 \times H$



Horizontal Illumination

For uniform horizontal illumination, wall washers should use an on-centre fixture spacing (d1) ratio or two times the offset from the wall (D)

Luminaire spacing distance: $d1 = 2 \times D$

D = Offset distance
H = height of room/wall height
d1 = Luminaire spacing

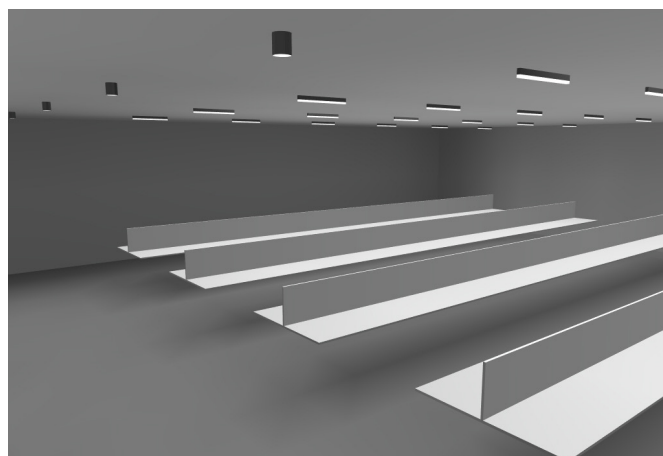
Quick Luminaire Spacing Guide

The below table provides a quick reference guide to which Flex wall wash luminaire to use along with offset and spacing recommendations at various heights. Listed is the optimum spacing when there are no on-site constraints and luminaire can be mounted as per optimum design requirements. These spacing guides achieve under the recommended uniformity of 3:1 av/min. at approx. 100lx av. on the wall

Mounting Height	Luminaire Offset	Luminaire Spacing	Spacing to Offset Ratio	Uniformity	Av. Lux	luminaire version
2.4m	0.7m	1.5m	2:1	<3	134	200mA / 8W
2.7m	0.8m	1.6m	2:1	<3	112	200mA / 8W
3.0m	0.9m	1.8m	2:1	<3	112	250mA / 10W
3.3m	1.0m	2m	2:1	<3	106	300mA / 12W
3.6m	1.1m	2.2m	2:1	<3	106	350mA / 14W

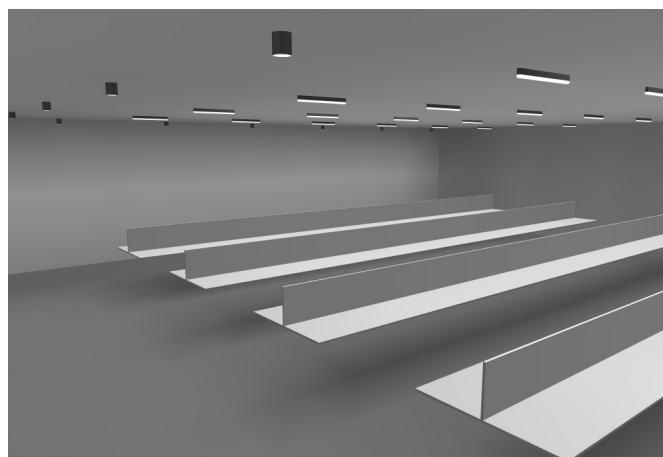
Zonal lighting - without wall wash

The featured layout shows a zonal approach to lighting a task oriented space. Task areas (over desks) are lit to 320lx with the use of VERSALINE luminaires and circulation spaces are lit to 160lx with FLEX luminaires. This zonal technique illuminates specific areas as per their requirements, creating hierarchy within the space, an essential element of human centric design principles.



Zonal lighting - with wall wash

The updated layout now features FLEX wall-wash luminaires on the rear wall. This addition enhances the visual comfort of the space and improves the overall brightness perception. Research has demonstrated the importance of illuminated vertical surfaces in task-oriented areas. By lighting the vertical surfaces visible beyond a monitor, we can reduce the contrast between monitors and the surrounding surfaces that fall within peripheral viewing angles, reducing eye strain and further increasing visual comfort.



*For further recommendations on zonal lighting refer to the VERSALINE Track design guide