

Strategy in Action

Product innovation: Flexbeam

In 2021, Thorlux launched Flexbeam, a stylish suspended luminaire with acoustic attenuation designed to reduce sound reverberation and echo. By combining high performance low glare lighting with a luminaire body that absorbs sound, two important functions within a space can be combined into a single product – reducing cost and de-cluttering the ceiling.

Flexbeam joins the Flex System family and shares the same high performance optics as used on the Flexline and Flexview luminaires launched in 2019.

With the trend continuing for commercial spaces to have open and exposed ceilings, providing the right acoustic performance can often be a challenge. Sound absorbing panels can be used – either suspended from the ceiling or fixed to the walls – in order for the space to meet recommended sound reverberation limits. The materials used are constructed in such a way that they absorb the sound and increase the rate of reverberation decay. The faster the sound decays, the lower the reverberation time – thus improving voice and audio clarity.

SOUND PERFORMANCE

The Flexbeam body is manufactured from a special sound absorbing material. Thorlux worked with a leading acoustics provider and carried out independent acoustic testing at the sound research laboratories at the University of Salford in Manchester. These tests provided a full technical report on

the sound performance of Flexbeam, which can assist the building acoustic engineers during building design. Flexbeam can also be supplied without the lighting element for applications where more sound absorption is needed in addition to the luminaires, affording a coherent overall solution.

COMFORTABLE, GLARE FREE LIGHTING

The optics within Flexbeam are common to both Flexline and Flexview and were developed within the FW Thorpe group in association with Luxintec. The high degree of glare control is ideal for commercial spaces where glare can cause discomfort. The patented optical system combined with a glare controlling reflector system provide high efficiency whilst still achieving superb glare control.

SUSTAINABILITY

With sustainability and circular economy principles becoming increasingly important considerations for all manufactures, Flexbeam has not only been designed for performance but also to be environmentally friendly. The sound absorbing body is manufactured from 65% recycled PET (polyethylene terephthalate), with over 47 recycled plastic bottles used in every Flexbeam. The material is also 100% recyclable at the end of life. This is combined with a 100,000 hour life and the ability to service the luminaire throughout its life.

By combining a long and reliable lifetime, serviceability, and recyclability at the end of life, Flexbeam is an ideal choice for sustainable lighting and acoustic solutions.

