

Air handling

Today recessed fluorescent luminaires are increasingly being used to integrate into a building's ventilation system providing the point of extract or supply. This approach may significantly reduce the amount of hardware that would otherwise interrupt a false ceiling. However, the effect of moving air through luminaires can have an effect on lamp operating temperatures, and as a consequence lamp efficacies, this needs to be understood by all within the specification process.

Within our organisation, Whitecroft Lighting has many years of experience in the design and integration of air handling luminaires. Our designers understand the importance of achieving a clean interface between ceiling and air supply equipment, and of ensuring the complete design compatibility and optimum performance through the many options available.

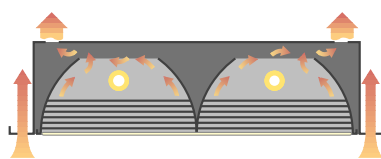
The majority of standard louvered fittings within the Whitecroft Lighting range may be supplied with an air extract facility. If required, cross talk and noise transfer control devices can also be supplied to meet the technical specification.

Flexibility is a most significant feature of Whitecroft Lighting air handling systems and indeed, our design resources. A number of products have been developed through close co-operation with clients, which offer a totally integrated air extract and supply facility within both individual luminaires and continuous systems.

Air handling requirements can be defined in two basic facilities, namely air extract and air supply.

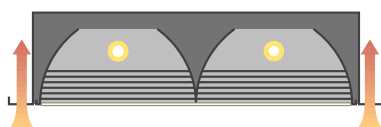
It can be advantageous to combine both features into the luminaire design, resulting in savings on the total installation and a less cluttered ceiling.

EXTRACT

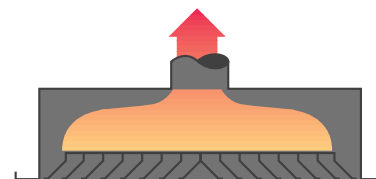


Where the luminaire body and frame can provide inlets to the negative plenum, enabling extracted air to be recycled or exhausted.

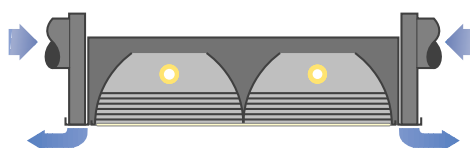
BYPASS EXTRACTION



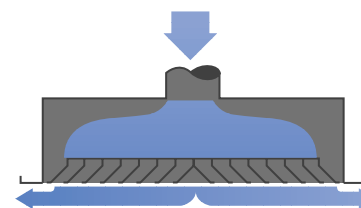
Where the extract air path is diverted away from the lamps e.g. via inlets in the frame, or integrated grilles.



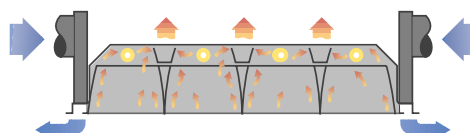
SUPPLY AIR



Where air is supplied through integrated boots/ troffers with supply outlets in the frame. Alternatively, air can be supplied via integrated supply grilles typically as the 8475 continuous lighting system.



COMBINED EXTRACT AND SUPPLY



Where the luminaire is designed to integrate with troughs/ boots for supply, and provide extract facility through the body of the fixture.