# **Datasheet**

## SCD – Staircase Diffuser

### Model: SCD

The Holyoake DS series of supply diffusers operate on the principles of displacement ventilation.

Displacement ventilation is essentially a buoyancy driven displacement process, where air is supplied into the room at low levels and at temperatures slightly cooler than the design room air. The cool air spreads across the floor, rising only when it comes into contact with a heat source such as a human. The heated supply air rises and exits the room via openings at the ceiling level, taking with it any pollutants that have been collected along the way.

Holyoake SCD displacement diffusers have been designed to enable step mounting making them ideally suited for use in auditoria and theatres. Although they can also be used in many other locations. Typically, these areas contain a large volume of space that, although not occupied, is still conditioned. Rather than conditioning the whole auditorium, by introducing the treated air unobtrusively from directly behind the occupants, only the space around the patrons is conditioned. This ensures that the occupied area is maintained at ideal conditions whilst saving energy treating the whole space at design parameters.

# Staircase Diffuser

### **Performance Data**

Volumetric Flow Rate	Differential Pressure	Sound Level (NC)	Throw (m)		
[I/s]	(Pa)		0.25 m/s	0.5 m/s	0.75 m/s
10	5	<15	0.03	0.02	0.015
15		<15	0.05	0.025	0.015
20	16	20	0.1	0.03	0.02
25	24	21	0.1	0.04	0.03