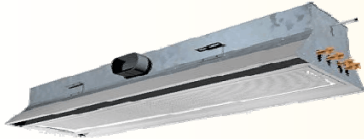




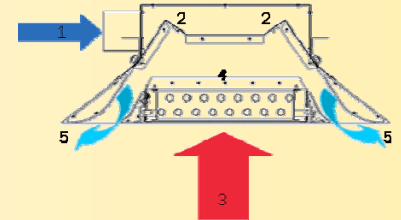
Quiet, Comfortable, Energy Efficient Heating & Cooling



ACB™ Active Chilled Beam

With active chilled beam systems the building's primary/ventilation air is continuously supplied to the active chilled beam terminal units by the central air handling system. This primary/ventilation air is cooled or heated to partially handle the temperature-driven sensible loads, while in the summer being cooled/dehumidified enough to handle all of the internal moisture-driven latent loads..

Primary/ventilation air (1) is introduced into the active chilled beam through a series of nozzles (2). This induces room air (3) up into the active chilled beam and in turn through a secondary water coil (4). Induced room air is cooled and/or heated by the water coil to the extent needed to control the room temperature. Induced room air is then mixed with the primary/ventilation air and the mixed air (5) is discharged into the room.

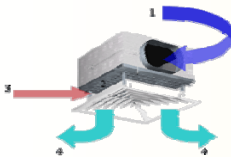


The movement toward sustainable building designs is being driven largely by environmentally-sensitive building owners and/or their prospective tenants. There are also heightened concerns about assuring a proper indoor environment at all times and conditions for the building occupants. In addition to providing temperature control, a fully effective HVAC system must also address many other indoor environmental issues that affect occupant comfort, productivity and health such as ventilation air, air distribution, humidity control, noise levels, etc.

As these owners and their consultants weigh their HVAC system alternatives, they often find that active chilled beam systems are the ideal "green" solution for many buildings. Indeed, active chilled beam systems are often key to meeting the new energy efficiency requirements of the Federal Energy Policy Act of 2005 (as revised).

DADANCO heating and air conditioning solutions utilize their unique patented induction nozzle technology. Dadanco's patented nozzle technology offers significant performance advantages in a wide range of HVAC products including their ACB™ Active Chilled Beams, Inffuser™ Induction Diffusers and Induction unit consoles. These advantages offer the opportunity for HVAC system designs that are sustainable, energy efficient, quiet and comfortable. Whether it is a new installation or a complete refurbishment, DADANCO induction technology can provide cost effective and environmentally green solutions.

Inffuser™ with Indirect Induction

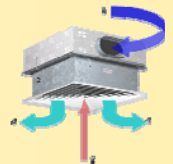


Inffusers increase the amount of air being delivered to the room through induction of secondary air into the Inffuser where it mixes with the supply air before being discharged into the room. Inffusers can be used in both constant volume and variable air volume systems.

With **indirect** induction (external entrainment) models the primary air (1) is introduced into the Inffuser through a series of nozzle (2). This induces plenum return air (3) into the Inffuser where it mixes with the supply air. The mixed tempered air (4) is then discharged into the room.

With **direct** induction (internal entrainment) models the primary air (1) is introduced into the Inffuser through a series of nozzles (2). This induces room air (3) up into the Inffuser where it mixes with the supply air. The mixed tempered air (4) is then discharged into the room.

In both cases the supply air is tempered by the induced air before the mixed air is discharged into the room.



Inffuser™ with Direct Induction

Pittsburgh AIR Systems, Inc.
INDUSTRIAL INC.

Commercial and Industrial Air Movement, Cleaning and Control

Mechanical ▲ Industrial ▲ Sheet Metal ▲ Specialty