

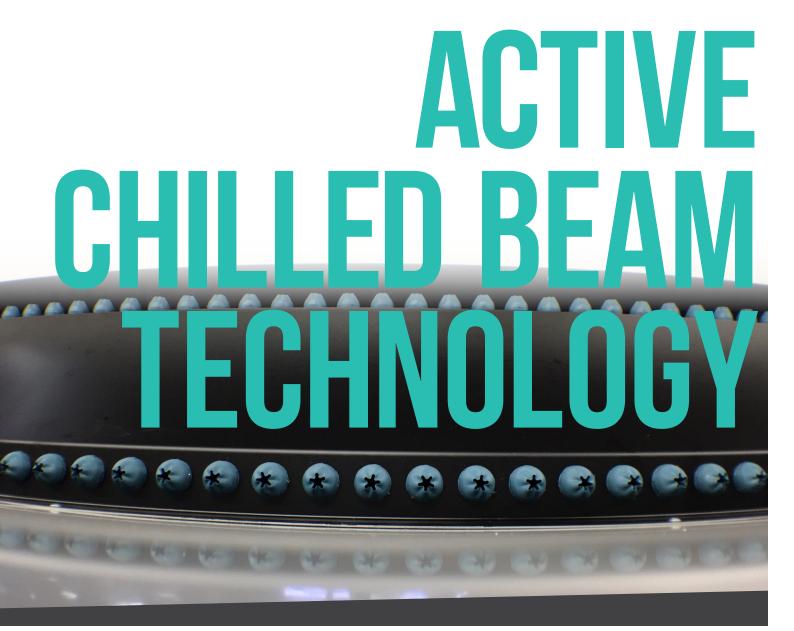
Dadanco was founded on innovation. Born in Australia, the initial breakthrough centered around a new nozzle design that allowed perimeter induction systems to operate more quietly and efficiently than ever before. Later, as popularity for Dadanco advancements grew in North America, more solutions followed to answer specific concerns resulting from rapidly rising energy costs as well as stricter environmental standards. Continually adapting to the evolving needs of specific customers remains an accepted challenge to our technology team and the source of our continuing development.

Dadanco Active Chilled Beam (ACB) systems are often an ideal "green" solution to meet high-energy efficiency standards such as ASHRAE 90.1. Energy efficiency is achieved by transferring a large portion of the cooling and heating loads from the less efficient primary air distribution system (fans/ductwork) to the more efficient water distribution

system (pumps/piping) using induction. With the significant reduction in primary air, ACB systems allow for constant volume dedicated outside air systems to be energy efficient and economical. These air systems make it very easy to demonstrate compliance with ASHRAE standards 62.1 (ventilation) and 55 (comfort).



Our breakthrough, patented induction nozzles deliver very high air entrainment ratios at low-pressure drops and very low noise levels that address shortcomings in traditional induction systems relating to floor space, appearance, noise levels, cooling capacities and energy consumption.



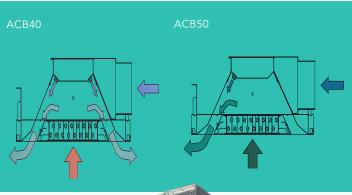


# ACB40/50

### **CEILING MOUNTED ACB CASSETTES**

#### (HORIZONTAL COILS)

These horizontal units are designed to fit into a standard 24"x24" ceiling grid system. These units are available in lengths up to 10 feet in 1-foot increments. The ACB40 is a two-way discharge while the ACB50 is a one-way discharge.



MODEL	SIZE		TYPICAL CAPACITY			SOUND	
	Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	LEVEL	
ACB40	24"	9.6"	2,000 - 10,000	12,000	15 - 250	NC15-NC40	
ACB50	24"	9.6"	1,500 - 9,000	11,000	15 - 130	NC15-NC40	







#### PERFORMANCE CHARACTERISTICS

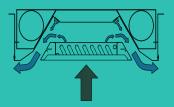
MODEL		SIZE		TYPICAL CAPACITY		SOUND
	Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	LEVEL
ACB4L	24"	6.8"	1,000-8,000	10,000	15 - 140	NC15-NC35
ACB5L	24"	6.8"	1,000-8,000	8,000	15 - 140	NC15-NC35

### **LOW HEIGHT ACTIVE CHILLED BEAMS**

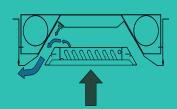
#### **ULTRA SLIM PROFILE**

Engineered to fit into a standard 24" ceiling grid with an ultra slim design for concealed installation into buildings with severely restricted interstitial space. DADANCO's nozzle technology provides superior performance delivered at the lowest possible noise levels.

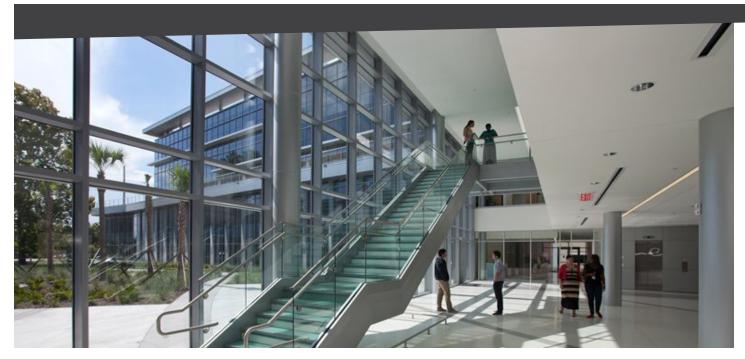
ACB4L



ACB5L



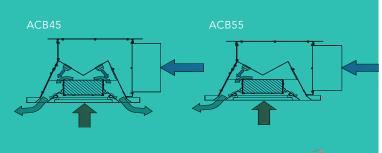
ACB4L/5L



# ACB45/55

## SLIMLINE CEILING MOUNTED ACB CASSETTES (HORIZONTAL COILS)

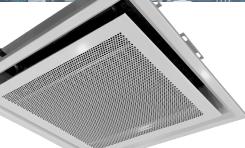
For applications where a reduced visual impact is desired or available width is restricted, these models feature a horizontal coil and a narrow 12" wide profile. These beams are available in lengths up to 10 feet in 1-foot increments. The ACB45 is a two-way air discharge pattern while the ACB55 is a one-way air discharge pattern.



MODEL	<b>SIZE</b> Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	SOUND LEVEL
ACB45	12"	8"	1,000 - 7,000	9,000	15 - 160	NC15-NC35
ACB55	12"	8"	1,000 - 6,000	11,000	15 - 90	NC15-NC35



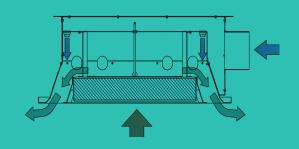




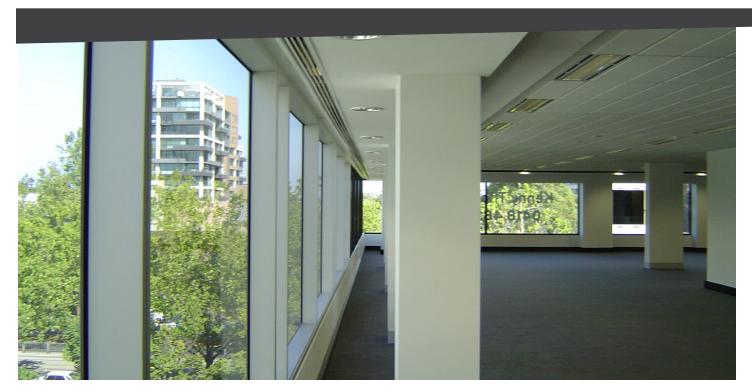
				PE	<u>:KFUKMANCE CHA</u>	<u>KACTERISTICS</u>
MODEL	SIZE		TYPICAL CA	TYPICAL CAPACITY		SOUND
	Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	LEVEL
4′	24"	8″	1,000 - 6,000	7,000	15 - 120	NC15-NC30
2′	24"	8"	1,000 - 4,000	5,000	15 - 80	NC15-NC30

## 4-WAY THROW-CEILING MOUNTED ACB CASSETTES (HORIZONTAL COILS)

Ideally suited for an open floor plan office application, the ACB44 high-comfort, four-way air discharge ACB unit is designed to fit into a standard 24" T-bar suspended ceiling. Optional air control blades facilitate the adjustment of the airflow pattern. The ACB44 beam is ideally suited for open plan and cellular office applications.



ACB44

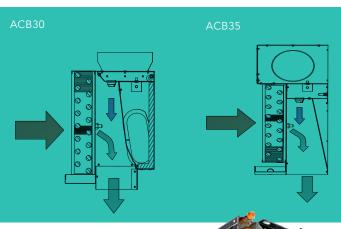


# ACB 30/35

### **CONCEALED ACB MODELS**

(VERTICAL COILS AND DRAIN PANS)

These concealed units offer improved aesthetics for applications where ceiling space is limited. Installed above the ceiling, the supply air is delivered via a 6-12" wide linear diffuser with a similar appearance to a conventional all air system. The ACB30 unit has the primary air connection on the side of the chassis and an overall height of 12" while the ACB35 unit has the air connection centered on the top of the chassis.



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MODEL	SIZE		TYPICAL CAPACITY			SOUND		
	Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	LEVEL		
ACB30	8.8"	11.7"	1,000 - 8,000	10,000	15 - 130	NC15-NC30		
ACB35	7.1"	17"	1,000 - 8,000	10,000	15 - 130	NC15-NC30		







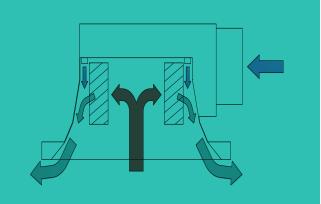
#### PERFORMANCE CHARACTERISTICS

<b>SIZE</b> Width	Height	Cooling (BTUH)	CITY  Heating (BTUH)	Primary Airflow (CFM)	SOUND LEVEL
24"	11.3"	1,500 - 10,000	12,000	15 - 180	NC15-NC30

### **CEILING MOUNTED ACB CASSETTE**

#### (VERTICAL COILS AND DRAIN PANS)

Designed to excel in applications where humidity control may be an issue – such as entrance or elevator lobbies – the ACB20 fits into a standard 24" wide suspended ceiling in lengths up to 6 feet in 1-foot increments



ACB 20



# ACB 10

### **BULKHEAD CONCEALED ACB**

#### (HORIZONTAL COILS AND AUXILIARY DRAIN)

Engineered for concealed installation into a bulkhead, the 17" wide unit is available in lengths up to 6 feet in 1-foot increments, and can be specified with an enclosure for exposed mounting.

<b>SIZE</b> Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	SOUND LEVEL
7.1"	7"	1,000 - 10,000	10,000	15 - 130	NC15-NC30

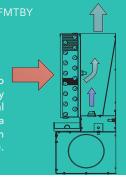


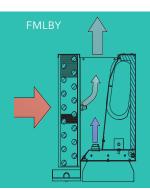


						PERFORMANCE (	CHARACTERISTICS
	MODEL	SIZE		TYPICAL CAPACITY			SOUND LEVEL
		Width	Height	Cooling (BTUH)	Heating (BTUH)	Primary Airflow (CFM)	
	FMLBY	8 3/4"	11 1/2"	1,400-4,500	2,900-6,800	15 - 70	NC15-NC30
'	FMTBY	7 1/8"	17"	1,400-4,500	2,900-6,800	15 - 70	NC15-NC30

## INDUCTION UNITS LOW BOYS AND TALL BOYS

High Efficiency Perimeter Induction Units (HEPIU) utilize Dadanco innovations to significantly improve the performance, energy efficiency and comfort levels of existing perimeter induction systems with minimal changes to existing infrastructure and less demand on space with a "greener" solution. As shown above, Dadanco makes a variety of custom and standard enclosures to suite your Induction Unit project (see page 7).





HEPIU



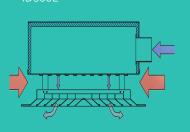


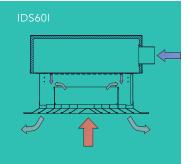
#### PERFORMANCE CHARACTERISTICS

<b>SIZE</b> Width	Height	Cooling (BTUH)	ACITY  Heating (BTUH)	Primary Airflow (CFM)	SOUND LEVEL
24"	11.3"	1,500 - 10,000	12,000	15 - 180	NC15-NC30

### **INFFUSERS®**

Enabling the use of lower-temperature and lower-quantity primary air, our innovations effectively improve energy efficiency and comfort in variable air volume systems – as well as other conventional HVAC system types – with minimal infrastructure changes and maintenance costs. DADANCO offers one, two and four way blow for internal or external entrnal entrainment.





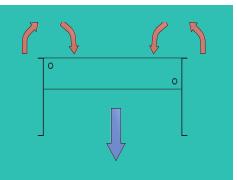
# INFFUSER®



# PASSIVE

### **PASSIVE BEAMS**

Passive chilled beams utilize natural convection in order to provide sensible cooling without the use of any forced air. Passive chilled beams are extremely energy efficient and virtually silent, however they provide much less sensible cooling than an active beam of the same size. Separate systems are needed to provide heating and ventilation. Recessed passive beams can be concealed above perforated ceiling tiles, or exposed passive beams can be used in open ceilings.



	PERFURMANCE CH	<u>iakacierisiics</u>
LENGTH	TYPICAL CAPACITY	WATER FLOW RATE
4′-10′	UP TO 500 BTU/FT	0.5-2.5 GPM

## **ACCESSORIES**

**Expanding your options** 

#### **DEW POINT ROOM TRANSMITTER**

Dew Point room transmitters are used to sense the dewpoint of the room and prevent condensation from forming on the pipes.



#### **VALVE PACKAGES**

DADANCO offers a wide range of valves packages, which can be supplied either loose or factory mounted. Motorized valves can be supplied with a wide range of actuators including both modulating or floating, wired or wireless.



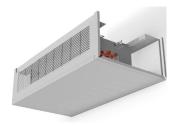
#### AIR CONTROL DAMPERS

Manual, pressure independent or motorized dampers are available.



#### **ENCLOSURES**

Enclosures are available for concealed bulkhead mounted chilled beams and floor mounted perimeter induction units. and can be specified in a wide variety of finishes with various grille/diffuser options.



#### **WIRE HANGING KITS**

Wire kits significantly speed up installation. DADANCO active chilled beams are available with kits specifically designed for our beams with loop or stud fixing anchors.





# LUXTON-REED CENTER

rom the thermal test chamber to the demonstration rooms – the Luxton-Reed Center is designed to showcase products while educating visitors on Dadanco technologies and applications. The offices and demonstration rooms were designed to give a real world experience of live product application in order to aid in the decision-making process.

Dadanco offers CFD modeling to analyze complex HVAC design questions and find potential solutions. The area in question is modeled in computer software and the performance of the design is simulated with a high level of accuracy to show the resulting comfort conditions of the design. Additionally, designs modeled with CFD can be set-up in the live testing chamber for a real world validation of the simulated results.

Dadanco's state-of-the-art R&D Laboratory/ thermal testing chamber is uniquely designed to simulate a wide variety of scenarios and test product performance. The 20 x 30 foot thermally controlled test chamber enables accurate measurement of air and water flows, temperatures, capacities, etc. It is highly configurable and can be used to mock-up and test projects and to simulate actual conditions.

We are proud to give you a tour and address your specific needs. Our demonstration rooms include Classroom & Laboratory, Office & Meeting Room, as well as Hotel & Hospital.

Call to arrange a visit and learn more about our technologies or discuss an upcoming project.



The Luxton-Reed Center 47 Westfield Industrial Park Road Westfield, Massachusetts 01085

(413) 564-5657 info@dadanco.com







WWW.DADANCO.COM



