



Project Name:	29-31, Brindabella Circuit, Canberra
Date Completed:	2007
Building Size:	10,655 m ²
Designed By:	RUDDS Consulting Engineers
Installed By:	Climatech
Building Rating:	Simulated 5 Star
System Used:	IDS60e
Number of Units:	554
<u>Design Criteria:</u>	
Room Temperature:	24°C / 50%RH
Chilled Water Temperature:	NA
Primary Air Temperature:	11°C
Sensible Cooling Load:	150W/m ²

active chilled beam

Perimeter system

Energy, efficiency +with all air



To achieve energy efficiency and meet GBCA Green Star targets not every project has to have chilled beams or is suitable for them. 29-31, Brindabella Circuit building is an example of a project being designed to meet its targets with all air VAV and constant volume centre zone. The solution for this project utilised DADANCO

INFFUSER IDS60e on both in their perimeter and centre zones. The plant delivers 11°C primary air to the INFFUSERS and this mixed with ceiling space at 24°C and is delivered to the occupied space at 16.3°C.

Inffuser cold air solution



The Project.

The Building is an example of a project being designed to meet its targets with all air VAV and constant volume centre zone. The solution for this project utilised DADANCO INFFUSER IDS60e on both perimeter and centre zones. The plant delivers 11°C primary air to the INFFUSERS and this is mixed with ceiling space at 24°C and is delivered to the occupied space at 16.3 °C.

The Solution.

INFFUSERS provided a solution for the delivery of lower temperature supply air by inducing secondary air directly into the primary air stream before discharging the combined warmer air streams through the air outlet to the conditioned space. The air handling units delivers the minimum quantity of primary air required for cooling only. The INFFUSER then induces additional secondary air to meet air circulation rates and provides safe delivery of low temperature air.

The Benefits.

- Increased air circulation rate
- Safe Delivery of low temperature air
- High energy efficiency
- Smaller HVAC infrastructure (Flexes, VAV boxes, Ducts, AHU and VSD)
- Reduced embodied energy
- Reduced plant room sizes
- Potential to increase the nett lettable area
- Delivering real comfort (Good humidity control, temperature control & air movement)