

4D GO VERY GREEN

4D Data Centres have always tried to lead the field in everything they do, so when it came to cooling their Tier 3 Data Centre in Surrey they turned to Celsius for the ideal Green solution.

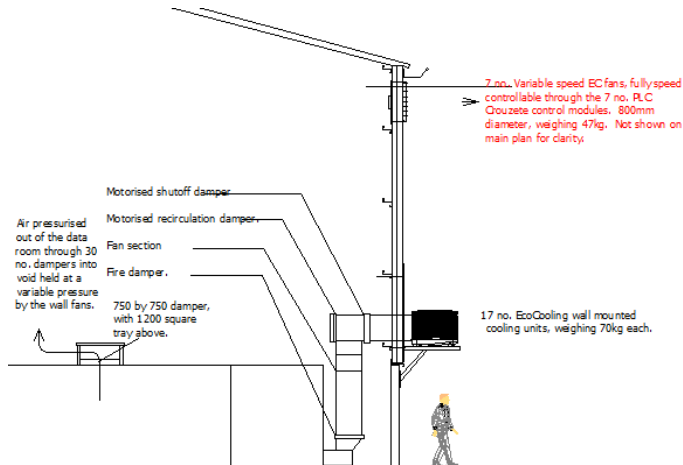
To cope with the 500KW Data load in their state of the art data centre they have installed 17no. Celsius EcoCooling side discharge evaporative cooling units and 7no. Celsius EC wall mounted extraction fans.

The system is controlled from 5no. PLC Crouzet Ethernet control modules fully integrated into the 4D control system on site. The Celsius scheme has a system of 'attenuation' for the winter months to ensure the correct temperatures are delivered to the cold aisles at all times.

Upon commissioning the scheme the whole EcoCooling system drew only **19KW** of power to cool the entire Data Centre, saving an estimated 310 tonnes of Carbon per annum and making it one of the most environmentally Data Centres in the World, with a PUE of less than 1.1.

The side discharge coolers have the air ducted under the raised floor allowing the floor grills to be positioned and moved to where ever the cool air is required, effectively eliminating the previous 'hotspots' that occurred,





Top: Internal view showing the ceiling of the Data centre with the extraction louvers.

Left Centre: Sectional drawing.

Right Centre: Internal ducting from the coolers directing the air under the raised floor.

Bottom left: PLC control systems for the EcoCoolers linked to 4D's main controls, interlinking into the fire alarm and generator testing.