H & V
Building Services Ltd
Building Contractors & Multi Service Engineers

The Old Dairy, 4 New Road,
South Darenth,
Kent. DA4 9AR

Tel: 01322 420040
Fax: 01322 861385
enquiries@hvbuildingservices.co.uk
www.hvbuildingservices.co.uk

BNP PARIBAS
COOLING SYSTEM UPGRADE

Client	**BNP Paribas** **10 Harewood Avenue** **Marylebone** **London** **NW1 6AA**
Consultant	**JD Partnership Ltd** **31 Wood Lane** **Sonning Common** **Reading** **RG4 9SJ**
Contact	**Sean Parnell** **CBRE** **BNP Paribas** **10 Harewood Avenue** **Marylebone** **London** **NW1 6AA**
Contract Value	**£650,000**
Contract Duration	**12 weeks**
Completion	**December 2017**
Reference	**W.King**
Works Description	**This project was based in London at BNP Paribas.** **BNP Paribas' head office in Marylebone, consists of 7 floors and is a 24/7 operating building.** **This project involved upgrading the supplementary cooling system, comprising of a new chilled water circuit including pumps and ancillaries serving fan coil units located within the ceiling void throughout the first floor, discharging through existing linear slot diffusers.** **Plinths were built in the chiller room to coincide with 2No new pumps to serve the circuit to the first floor.**

With very minimal space throughout the building, we ran 8 inch flow and return chilled water circuits from the basement chiller room to risers within the basement.

From the risers we reduced down to 4 inch until we were on the first floor. From here we converted from barrel to copper, which continued on to feed all the newly installed units on the first floor.

New copper xpress pipework was taken from the risers and run throughout the floor, picking up each Fan Coil Unit. We adopted a crimped system to combat the vast amounts of pipework and lack of space within the ceiling, which availed to great success.

In all 64 new fan coil units were installed across the floor. All of which were ducted to existing linear slot diffusers. Each Fan Coil Unit was also installed with a drip tray and a condensate pump, in which drainage was run in hoses from each unit to 2 central risers within the kitchens.

Each unit was installed with a Pressure Independent Control Valve (PIC Valve). We chose to install a PIC valve on each as they make a significant contribution to efficient energy usage and offer cost savings by preventing over- or under-supply of heating or cooling energy. They also improve the control accuracy and, therefore, enhance room comfort.

A fully operating BMS, controls the percentage that each unit needs to be running at to coincide with demand, on which is a very busy floor.