



NORMANTON POOL //



This swimming pool heat pump has just been commissioned as part of a PSDS project.

The heat pump is a Clade Oak 350KW CO2 unit fitted with silencers. The silencers reduce the noise levels by 10 db which means the nearby residential buildings are undisturbed.

The heating system has AHUs, radiators and underfloor heating all working well on a high DT of 40C. Additionally there is the pool heat exchanger which is sized to keep the pool warm but not for heat up. In the event the pool needs reheating from cold all other heating is turned off so the full duty of the heat pump can be used. This saved an over sized and expensive heat pump.

The radiators and AHU coils were changed as part of the project. It was not necessary to replace pipework which saved significant disturbance, this is made possible by the wide DT of CO2 heat pumps.

The DNO supply is restricted on this site and would have needed an upgrade at a cost of over £100k. However, the Clade Engineering team have implemented a capacity control based on site electrical draw. As the site power demand reaches the limit the heat pump is backed off.

Over all, clever engineering by the Clade team facilitated the project going ahead rather than being scrapped in the face of DNO costs, oversized plant and noise restrictions from the planners.