

Mental Health Unit Mile End Hospital:

Principal contractor for cooling installation

East London **NHS**
NHS Foundation Trust

Optimum Group services were appointed principal contractor to undertake a full cooling replacement. The project comprises the provision of cooling to the Tower Hamlets Mental Health Unit at Mile End Hospital. The unit within the grounds of the hospital comprises of 117 bedrooms within the secure unit.



The works were to be undertaken whilst occupation remained throughout the unit, this was to include constant access to seclusion rooms and security through access controlled doors within the unit had to be maintained. Each ward was vacated and the patients decanted around the unit so that work may progress whilst the wards are unoccupied. Thus the installation was undertaken in phases to suit the occupation of the wards. These works did incorporate several weekend crane lifts of which during these works full fire brigade access had to be maintained which lead to

careful and coordinated planning to ensure all lifts within the hospital grounds went smoothly and too plan. The installation of 7 VRF systems with 128 indoor units were incorporated with anti-ligature housings covering each indoor fan coil unit, this ensured we kept to the important anti-ligature setup of each bedroom. Replacement sinks and housings we also installed as part of our works also were anti-ligature.

The building is served with heating, ventilation, cooling and hot and cold water by dedicated central plant located at roof level. The 6 air handling units which are configured with supply and extract fans, heat recovery and gas fired heaters. Fresh air is discharged from the units into insulated supply air ductwork which then passes into the building and is distributed to reheater batteries which raise the temperature of the supply air according to the space demands of the areas served by the individual heater batteries. New cooling coils were inserted into the supply air ductwork on the roof supplied with chilled water from a new air cooled water chiller.

