

# Chesham Data Centre

Complete	Area	Client	Architect
2018	UK England	Hurley Palmer Flatt	TTSP

The data centre, designed for Project Matterhorn, covers two buildings. Each has a total area of just over 35,000 sq. metres. Each data centre is a two-storey building with mechanical and electrical plant on the ground floor and three individual data halls at first floor level.

Chillers and generators are located in a two-storey plant compound at the front of the building.



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### **Services provided**

Sandy Brown was employed to develop the acoustic design and provide input during design phase of the project. Key considerations included:

- mechanical and electrical plant noise and vibration
- environmental plant noise to neighbours.

### **Special acoustic features**

The site has 24 chillers and 18 emergency generators. It was necessary to base our assessments on the assumption that all of the units could potentially operate at one time, even though generators would only operate in emergency conditions or for periodic testing.

Housing the chillers in a sound attenuating enclosure with further attenuation provided through the inlet and discharge air paths and exhausts helped to limit the amount of noise egress from plant on the site.

Noise sensitive residences border the data centre to both the north and south. Due to the arrangement of the building and the large amount of plant on site it was also necessary to consider the effect of noise from the proposed plant to the nearby industrial and residential premises.