

# 1650kVA Generator Set for mixed use property in prestigious London area



## The Site

A 1970's built office building was demolished in late 2014 to make way for high-quality commercial, residential and retail development in the heart of Mayfair, London. The revitalised eight-storey building, will include six luxury flats and be expertly finished to the highest standard, will enhance its surroundings and bring new depth and diversity to the square. With the addition of a new underground station in 2018 it is tipped to be one of the most sought-after locations for commercial and financial tenants.

**Customer:**

**UK's leading  
independent building  
services company**

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# CASE STUDY



## The Project

Due to various assignments previously carried out successfully for the customer, The Generator Company were awarded the project and asked to supply, install and commission a 1 off 1650kVA STANDBY rated, MTU powered generator set supplied c/w set mounted panel controller to support the life-safety system within the new building, including fire alarms, elevators and sprinkler system and provide full back-up power to the building.

On receiving the contact from the client, a dedicated Project Manager was appointed to the project to ensure that both the customer, and the project, was

given 100% focus throughout. This guaranteed that the customer had someone on hand whenever they were needed.

Before any works were started, our project manager attended various on-site meetings with the customer and the end client to work out and finalise the work schedule for the project to enable us to meet the tight deadlines and tight site constraints that were in place.

After four months of meetings, site visits and survey's the project was ready to begin in early 2016 for the planned completion date of early 2017.

On the specified date, our Project Engineers and Project Manager were on site to install the cooling system, roof mounted exhaust system and exhaust flue ready for the delivery of the generator to basement 1 level of the building.



The bulk fuel tank was craned over the building into basement level 1 via a site crane and positioned into place. The remote radiator was craned onto the roof of the building and positioned in place.

On the required weekend and after road closure permission was granted by Westminster City Council, the generator was lifted over the building via a 500 tonne crane into the basement level 1, offloaded and skated into position in the generator room by our project engineers.

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Once the generator was manoeuvred into position, our engineers could then progress with the building of the acoustic enclosure, to achieve 60db(A)@1m, around the generator with final connection to previously installed service from the generator enclosure made to allow our commissioning engineer to test the flow rates on the remote cooling circuit and commission the fuel system and vent system.

On completion of testing, 5 x 240kw temporary loadbanks were used to load-test the generator to ensure that it met with the tight site restrictions that were in place.



Final testing of the system included an integrated system test to bring the generator into service with the completed LV system, fire alarm, lifts, cooling and sprinkler systems. A black building test was carried out, resulting in the electrical power to the entire building being shut off to simulate a total power failure allowing us to test the functionality of the generator and ancillary equipment, both of which was successful.

On completion of the successful installation and integration of the new generator system to provide full power to the building, and with a very happy end client, we spent a day training the client's supervisors and other staff on how to use the system and individual equipment as well as leaving them with system operating manuals and generator technical manuals.