## Case study 203

## High capacity heater used to dry out building mid-construction

Although a small quantity of moisture is necessary for some materials to cure correctly during a building's construction, excessive dampness can pose a serious long-term issue. In fact, high humidity levels can create major problems for a contractor, including delays to finishing and materials being damaged.

Of course, during the winter months, the scope for additional obstacles is heightened by the fact that open structures are exposed to the elements.

This is quite a common occurrence, particularly at this time of year, and we've been busy working with customers to ensure the effects of recent rainfall are minimised. One of our clients is currently in the process of constructing a new car showroom and office complex for a world-famous luxury car manufacturer.

The building itself has a similar footprint to a full-size football pitch and spans four storeys, so it's fair to say there's quite a considerable area to dry before the development proceeds any further. Fortunately, we've got the kit to handle such a requirement – and it's already working its magic!

Our client's preference was for us to focus attention on one floor at a time and use the same equipment in each instance. An Andrews specialist visited the site beforehand to ascertain the best way forward, with a combined heating and ventilation hire proposed.

Positioning an FH4000 high capacity heater at ground level, we were able to connect two lengths of ducting which was then split off again to help distribute large volumes of warm air throughout the application. The drying process was aided by the use of some of our ASF950 ventilation fans, which helped the heat reach all four corners of the building.

Prior to our intervention, relative humidity inside was recorded at being around 80%. Now, thanks to our kit operating almost constantly over the past two weeks, this figure is considerably lower on the two floors which have been sufficiently dried.

Although a conventional dehumidification system wasn't seen as the most practical and cost-effective response due to the sheer size of the building, our experts were able to recommend an alternative course of action that was equally effective and more economical to operate!







Nominal heating duty: 383 kW 1,306,796 btu Air flow (max): 24,000 m<sup>3</sup>/h Power supply: 415 V 3 ph +E 50 Hz Run 20 A Noise level (max): 76.5 dBa @ 1 metre Weight (kg): 1,300 kg Dimension: 3,850 x 1,2000 x 2,015 mm Plug type: BS4343 4 pin 3 ph 32 A Duct length (max): 40 metres Generator size: 20 kVA Duct size: 600 mm x 2 Fuel Consumption: 38 l/h Typical heated area: 8,457 m<sup>3</sup> Fuel type: Gas Oil Flue: 1 metre x 250 mm Tank capacity: Seperate fuel buggy/tank required Dimensions (L x W x H): 3,850 x 1,200 x 2,015 mm Control: Manual (external controls available) Flue size (min): 1 metre x 250 mm



