

CASE STUDY

Client: Water Heating Services
End User: Mercure Hotels
Project: Atlantic Tower Hotel Upgrade
Products: StorPlate SPPC DHW Generators
Date: January 2017

Project Description

Arbe won an order for the design and supply of 3 off StorPlate SPPC DHW packages. The units were sized based on calculations made by Arbe based on the number of bedrooms in the hotel. The units each had a capacity of 2000 litres with a heat input of 175 kW

The controls for the package were designed using PLC controllers with touch screens for system interrogation and for controls of pumps and valves. The pumps used on the packages are high efficiency with single phase motors and integral protection. The control valves installed as part of our standard StorPlate units have integral overheat protection and, as such, comply with all G3 Building Regulations so there is no need for additional and high limit valves supplied by the contractor.

The system provides hot water at 60 DegC with a return temperature of 55 DegC with a peak output flowrate of 12 litres/second for 10 minutes. This equates to an instantaneous heat load of 2,512 kW across the 3 packages.

Arbe also supplied as part of the contract, a DN80 AMF air & dirt separator as the units were being installed in an old system. The AMF units provide protection for new pipework and heat exchanger systems as they remove sludge and debris from the water as it passes through, along with any air that is in the water too.

