

## ARISTON'S NUOS IS ICING ON THE CAKE AT HEATHROW'S PERFECTIONISTS' CAFÉ



Two *NUOS 250i* floor-standing heat pump water heaters from Ariston have been installed at Heston Blumenthal's new restaurant, The Perfectionists' Café, at Terminal 2 of London's Heathrow Airport – which officially opened on 23 June 2014. The product was specified due to its exceptional CoPs adhering to the airport's strict energy

efficiency requirements.

The project, which was managed and overseen by London-based consulting engineering firm BSE 3D Ltd, was part of Heathrow's £2.5billion refurbishment of Terminal 2 – also known as 'The Queen's Terminal'. From a development viewpoint, Terminal 2 needed to be 10% more efficient than Terminal 5, as well as adhere to all the necessary Building Regulations. The design brief also stipulated that domestic hot water (DHW) for the restaurant was produced by the most energy efficient means possible.

The *NUOS* units were fitted on a mezzanine plant deck, with ducting running from the unit, down into the ceiling of the kitchen, where it provides supplementary cooling for the preparation and washing-up area.

Philip Todd, Director of BSE 3D Ltd, was responsible for specifying and installing the *NUOS units*. Commenting on the project, he said: "We've worked on a lot of domestic and commercial heating projects, so were well aware of the options available to us for providing the restaurant with domestic hot water. Ideally, we wanted a method of recovering the unwanted heat in the kitchen and providing


domestic hot water in the most efficient way. The *NUOS units* integrate an air source heat pump for generating the domestic hot water. Therefore we ducted away the hot air within the kitchen to the units, utilised the unwanted heat energy and returned it back into the kitchen cooler than before.”

He continued: “Having compared a number of products on the market, the *NUOS* heat pump water heater was head and shoulders above the rest – especially in terms of its impressive CoP for the application. I’d used the units before, so knew they offered the good controls and capacity, and the integrated solar / backup coil could also provide excellent back-up and allow us to meet strict energy efficiency requirements in order to pasteurise the cylinder and provide resilience.”

Phil concluded: “*NUOS* fell well inside budget requirements and offered manageable re-heating times. Plus, it was much better than looking at a purely electric option – given as there is no gas on the Heathrow site, for obvious reasons!”

With a CoP of 2.8 (tested in accordance with EN 16147), the *NUOS* is capable of raising the water temperature to 55°C with just the heat pump (a back-up immersion is present to bring the temperature to 65°C) making it an ideal solution for off gas properties or as a replacement for existing electric only cylinders. It also features an intelligent control system which allows the end-user to program two separate times for hot water to be available. The heat pump water heater was also recognised for its efficiency in the 2012 edition of Construction Products Innovation and Achievement (CPIA).

Furthermore, to guarantee safety and hygiene, the *NUOS* heat pump water heater includes an anti-legionella function, which regularly heats the contents of the cylinder to 65°C in order to sterilise the stored water. The cylinder also has a five-year guarantee and the electrical components are guaranteed for two years.



Ariston Thermo UK, which is part of the Ariston Thermo Group, is a manufacturer of domestic heating, hot water and renewable products. With over 20 years of experience in the UK, Ariston Thermo is a worldwide leading company in the heating and water heating industry.