

Case Study

The Project:

Sunpower CO2ttage
Petersfield, Hampshire

The Heating Solution:

Jaga Strada Radiators with DBE

The Detail:

Sustainability and Innovation Manager at Radian Group, Paul Ciniglio completely retrofitted his own home and achieved an 80% reduction in his household carbon dioxide emissions. To distribute heat efficiently, Paul combined Jaga's Strada with Dynamic Boost Effect (DBE) technology with a Daikin's Altherma air heat pump. The six radiators – located in the living room, dining room, kitchen, bedrooms, and hallway, together with a heated bathroom towel rail – deliver an environmentally friendly heating solution and substantially reduce CO2 emissions.

Paul's home, known as the Sunpower CO2ttage, is a part of the 'Old Home Super Home' network alliance, which aims to reduce its carbon footprint by applying sustainable home technology. Thanks to his innovative solutions, the alliance regards his house as one of the most energy efficient homes in Hampshire. The eight month-long retrofit project achieved an improved standard that was more than double current building regulations.

As the Innovation Manager at the Radian Group, an award winning provider of affordable housing, Paul has years of environmental home building experience. Paul's choice to use Jaga heating was based on the success of a 2008 Radian Group project located in Grayshott, Hampshire, in which he used Jaga's Strada radiators. This project, consisting of 2 x 2 bed houses and 2 x 2 bed bungalows, was built to 'Code For Sustainable Homes' level 3 standard, and Jaga played a critical role in lowering energy consumption.

The Strada, part of Jaga's Energy Savers range, benefits from intelligent Low-H2O technology based on the concepts of low mass and low water. With only one tenth of the weight and water content of a traditional steel panel radiator, the powerful Low-H2O element offers rapid yet regulated heating and has a reaction time that is three times faster than the performance of an ordinary radiator.

The addition of the DBE unit to the Low-H2O heat exchanger makes it possible to boost output by as much as 250%, allowing for smaller, more powerful radiators that are highly responsive and perform efficiently at flow temperatures as low as 40°C.

The Strada DBE radiator is a small, slim-line high-efficiency unit that uses significantly less water than conventional radiators with its Low-H2O specifications, equating to a 10-15% energy bill saving.

About Jaga:

Part of one of Europe's leading manufacturers of heating systems, Jaga's UK operations were originally established in 1991. Jaga Heating Products is the European market leader in the production of safe, high performance, energy-efficient radiators. The winner of many design awards for its products, Jaga has always been active in promoting more environmentally responsible ways of building, living and heating. Jaga's Low-H2O products are just one example of this philosophy of innovation, design and ecological awareness.



Strada DBE : Technical Sheet

Rigid and Robust:

The vertical lines of the aluminium grille and the flat front panel give the Strada its robust character. Super-powered Low H2O technology is concealed inside, guaranteeing ultra-fast and perfectly regulated heating for any building.

- The valves and its connections are concealed within the standard casing
- With a Low-H2O heat exchanger of pure copper and aluminium:
 - totally non-corrosive, a 30 year guarantee
 - efficient: rapid heating up due to super low water content
 - high heat output achieved with normal and lower flow temperatures
 - the optimal combination of convection and radiation
 - with dirt-repellent and dust-proof lacquer in graphite grey (RAL 7024)
- The surface temperature of the casings stays safe-to-touch, even at high flow temperatures
- The casing can be removed for decorating
- Standard with extended air vent with transparent synthetic drain tube

Strada dimensions:

Height: 20 cm, 35 cm, 50 cm, 65 cm, 95 cm

Length: 50 cm up to 280 cm

Breadth: 8.5 cm, 11.8 cm, 16.8 cm, 21.8 cm

Watts: from 269 up to 8484 (Twin)



Colours:

Scratch resistant epoxy-polyester finish with a structured satin gloss surface. High UV resistance.

Standard colours without surcharge:

- white (133) RAL 9016
- white (101) RAL 9010
- sandblast grey metallic (001)
- Other colours available

High Efficiency:

With its low water content and high coefficient of heat conduction for low flow temperatures, the Strada, with its modern Low-H2O element, is ideal to use with combination and high efficiency condensing boilers.

Twin Power:

Strada is also available with the super-powered Twin heat exchangers. The boiler temperature is on average 15% lower for equivalent radiator dimensions.

Reference Projects:

Aylsham Police Station
Beechanger End, Grayshott

