

Jaguar / Land Rover

CA teaches an old cat new tricks



SolarWall® Area: 268m²

SolarWall® Colour:

Corus Colorcoat Prisma® in Ariadne

Estimated Annual Energy Savings:
80,530kWh

Estimated Annual CO₂ Savings:
19tCO₂

Client: Jaguar / Land Rover

Main Contractor: Welconstruct

Roofing Contractor:

CA Refurbishment Projects

Completed: January 2009

In early 2008, Jaguar / Land Rover were given the go-ahead on a project to renovate an existing building in Leamington Spa into a technical training academy. The aim of this academy was to train and develop Jaguar / Land Rover dealership staff skills and techniques in servicing current and future vehicles.

The project was completed in December 2008 with the installation of a 268m² SolarWall® perforated Transpired Solar Collector, using Colorcoat Prisma® in Ariadne supplied by Corus, which was specifically chosen because of its ability to deliver eye-catching buildings that will stand the test of time while also offering a technically and aesthetically superior, more robust coating solution than PVDF.

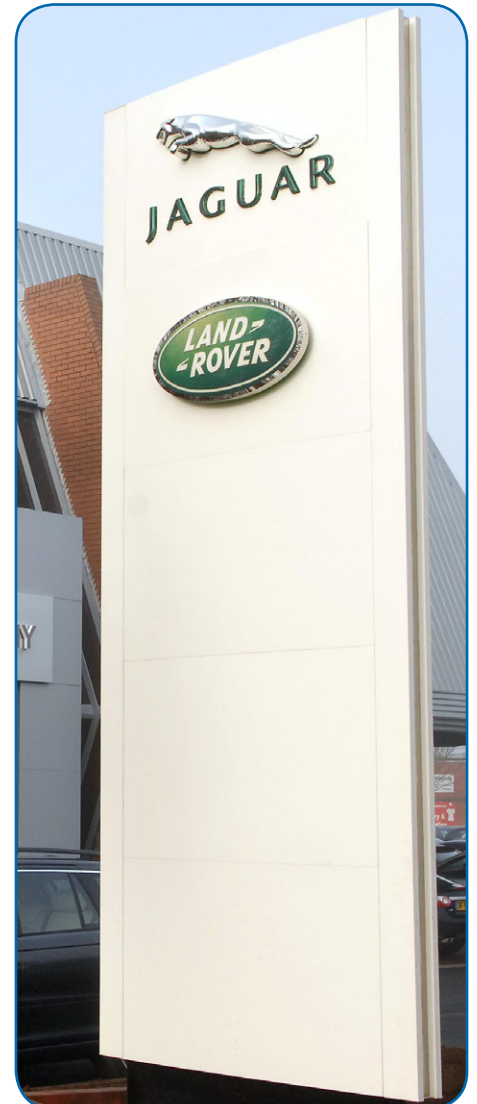
Colorcoat Prisma is a trademark of Corus

The installation of CA's SolarWall® at this one site is being used to set an example to other Jaguar / Land Rover dealerships. As part of a company-wide environmental policy, all dealerships are being asked to consider the sustainability of their site operations and to take on board carbon reduction measures wherever possible.

Andrew Brewster, Technical Services Design Engineer at CA Group, said: "As the building has been empty for a considerable amount of time and due to the heavy foot traffic expected, it was imperative that the building complied with current and future regulations.

It was also necessary to ensure that, owing to the nature of the work carried out in the training academy, the SolarWall® was able to provide a ventilation requirement of up to one air change per hour into the building whilst maintaining a safe, comfortable working environment of 20°C."

The SolarWall® is estimated to save the academy more than 80,000kWh in energy and 19 tons of CO₂ per year.



SolarWall® drives energy savings at Jaguar Land Rover Academy

More than 80 construction industry VIPs attended a special 'SolarWall® in Action' event at the Jaguar Land Rover Training Academy in Gaydon, Warwickshire.

Guests at the event, (which included representatives from The Welsh Assembly, Costain, Kier, B&Q, ASDA and Focus DIY) were able to see first hand how SolarWall®, has helped the refurbished building to save more than 80,000 kWh per year with an associated reduction in CO₂ emissions of 19 tonnes.

The SolarWall® perforated Transpired Solar Collector (pTSC) is an innovative solar air heating system that utilises solar radiation to deliver naturally warmed fresh air into buildings providing a renewable heat energy source. The SolarWall® technology was developed by Conserval Engineering of Toronto, Canada and has been used in 30 countries around the world and is available in the UK through CA Group. At the Jaguar Land Rover Academy, the 268m² SolarWall® was incorporated as part of a refurbishment project to convert the building into a state-of-the-art technical training academy for which sustainability was a key part of the brief.

Brian Watson, Commercial Director at CA Group commented: "The event was oversubscribed by over 40% which just goes to show the huge level of interest in this type of renewable building technology. In the past people in the industry have said the SolarWall® sounded too good to be true; but having seen the product in action at the Jaguar Land Rover Academy, no one was in any doubt that this is one of the most exciting renewable products on the market today."



SolarWall® is one of CA Group's flagship solutions and the potential is enormous. With new legislation such as the Carbon Reduction Commitment coming into play, it will become critical for organisations to look for intelligent and cost-effective ways of making their buildings more sustainable."

With its proven heating cost reductions of up to 50%, SolarWall® easily exceeds the Merton Rule requirement for renewable energy, whilst also offering the usual paybacks through energy savings of as little as three years for new build and seven years for refurbishment projects. SolarWall® systems are ideal for any building types with a heating and or ventilation requirement including industrial sheds, schools, hospitals and other commercial buildings.

Corus, as joint organisers of the event have been involved in the development of the Colorcoat Prisma® pre-finished steel for the SolarWall® collector which is manufactured at the Corus Colors site in Shotton. This has undergone extensive testing at Swansea University, using a specially developed solar simulator rig, which has been used to optimise the solar absorbance of the coating whilst maintaining the availability of an attractive colour range.



Paul Jones, Technology and Innovation Manager, Corus Colors, comments: "Historically, perforated transpired solar collectors have been made from very dark shades – mainly black – which has limited the uptake of this type of product as it is not aesthetically pleasing. The Colorcoat Prisma® coating formulation is optimised to absorb as much solar radiation as possible across a wide colour range, so impact on the building aesthetics is limited."

