



solarcentury

Case study

Gazeley Sheffield



GAZELEY

“Generating onsite renewable energy is vital to the success of our business”

Nick Cook, Development Director,
Gazeley

‘BLADE’ : A new generation of Industrial Solar Power

Gazeley UK Ltd. are a leading provider of distribution centres across Europe. Having recognised the economic and environmental advantage of sustainable design and its impacts on the workplace, Gazeley are stringent about low energy designs throughout the conception, construction and operation of their buildings.

Gazeley have developed their own ‘Eco-Template’ in response to their customers increased demand to deal with their ‘Corporate and Social Responsibility’ agendas. In addition, to enhancing all aspects of sustainability, Gazeley are convinced that the changes should not cost ‘a penny more’ for the end user. The template achieves significant improvements throughout Gazeley’s buildings; addressing landscape issues, reducing CO₂ emissions, saving energy, reusing water and specifying recycled materials. Solarcentury have worked with Gazeley properties since 2003, to design and deliver cost effective solar technologies on several projects across Europe.

Such is Gazeley’s commitment to on-site renewable energy, that Solarcentury have recently developed a fast to fit, highly productive PV solution for industrial roofs. The first installation of the SB1000 Energy Roof took place on the 48 acre site of the Gazeley ‘Blade’ warehouse, Sheffield in October last year. A total of 36 SB1000 solar rooftop generators, each rated at 1kWp, were installed to form the energy roof system without any building structural upgrade costs. Generating over 28,000 kWh each year, the system is likely to save the CO₂ emissions equivalent of eight three bedroom houses and provide 75% of the offices electricity needs.

For the fast moving industry, the SB1000 energy roof system has been designed to slot simply into the work flow of a building project and provide a simple PV solution. The majority of the system is built off-site and can be installed in as little as four man hours per 1 kWp generator, with the role of roofers and electricians clearly split to provide a simple handover of trades. This is a critical factor for success, with the turn around of modern commercial buildings as fast as ten weeks.



This new Energy Roof has initially been engineered for metal composite panel roofing, such as the Kingspan KS1000RW product, but is to be developed for a range of industrial roofs. Ultimately, by delivering a 2.5% higher yield and reducing installation costs by up to 40%, compared with other solar installations, this new development offers clear advantages. With a 25 year warranty on all system outputs, installations are expected to produce energy for up to 70 years. This is serious technology that requires investment, but ideal for industries looking to make the low carbon commitment and 'future-proof' their building against rising electricity costs.



Nick Cook, development director for Gazeley says: *"We are delighted to be the first to deploy the SB1000. Generating onsite renewable energy is vital to the success of our business, and we welcome any developments from Solarcentury that enable us to drive energy production forward with minimal disruption to our operations. Solarcentury clearly understand our needs, this is vital as Gazeley has put sustainability at the very top of its agenda as we believe that businesses must become environmentally aware to survive."*

Alan South, Chief Innovation Officer at Solarcentury says:

"The interest in solar technologies and how they can be integrated into sustainable buildings is growing all the time. However, the time has come to make solar simpler to build and simpler to justify commercially. The construction of a modern industrial building is a highly refined process, and it is increasingly critical that solar installation is a seamless part of the process. It is simply not acceptable to expect a fast track building programme to be compromised to suit the needs of solar energy, so the solar industry must adapt."

The example of Gazeley illustrates the sharp cuts in carbon emissions that can be achieved through the application of photovoltaics, which combined with other environmentally friendly technologies can make a significant positive impact on the environment.



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