Building Design and Construction

Thoughtful design can make buildings part of the solution to the air quality challenge and create sought-after properties with lower operating costs. Design can ensure energy-efficiency, reducing or eliminating the need for on-site generation; promote and enable no-or low-emission transport; and foster improved management of goods and service deliveries.

Construction and refurbishment activities also affect air quality, creating dust as well as emissions from diesel machinery. These too can be managed to reduce the impact your development has on the West End.

FOLLOW BEST PRACTICE DESIGN AND CONSTRUCTION TO:

• Create sought-after real estate
• Strengthen your reputation as a landlord
• Reduce in-use operating costs

FOLLOWING BEST PRACTICE IN DESIGN AND CONSTRUCTION AT 7 AIR STREET HAS REDUCED THE CROWN ESTATE’S IMPACT ON LOCAL AIR QUALITY AND CREATED Sought-after office space.

CASE STUDY

7 AIR STREET
The Crown Estate’s 7 Air Street property, rated ‘Outstanding’ under BREEAM 2011 standards, incorporates a green roof which filters pollutants out of the air, and extensive facilities for cyclists.

Emission savings are achieved through low energy air conditioning, LED lighting, a highly effective building envelope that reduces heating and cooling requirements and energy supply from fuel cell technology and solar panels.

Refurbishment works outperformed industry best practice, winning a Considerate Constructors Scheme Gold Award.

The property was over 80% let within 8 weeks and all tenants have signed up to green lease clauses including extensive energy reporting and low VOC finishes.

PTO to find out more.

Things to Think About

• Ask your architect to design to BREEAM standards
• Insist on a contractor who participates in the Considerate Constructors Scheme
• Find out about installing Green Infrastructure on or around your building

newwestend.com/airquality
CASE STUDY:
7 AIR STREET

Completed in 2015, The Crown Estate’s 7 Air Street is the first Grade II listed building ever to achieve the BREEAM 2011 Outstanding rating (less than 1% of commercial buildings).

Recognised as the UK’s most sustainable historic building, the Regent Street scheme provides 45,700 sq ft of office and retail space, along with communal terraces, a roof garden, three striking pieces of original art and extensive facilities for cyclists.

An ecological roof incorporating flowers, vegetation, grasses and habitats is designed to attract insects, birds and bats, alongside offering office workers an opportunity to enjoy an outdoor space. The species-rich green roof forms part of The Crown Estate’s ecology masterplan, called ‘Wild West End’, where it is working with a number of other landowners in the area to deliver a hectare of new green space between Regent’s Park and St James’s Park.

The seven-floor building connects to a unique central energy centre, powered by fuel cell technology, saving around 350 tonnes of carbon emissions each year. It provides power to 500,000 sq ft of commercial and residential accommodation on and around Regent Street, including 7 Air Street, the Cafe Royal Hotel and 20 Air Street. Further carbon savings are achieved through low energy air conditioning, LED lighting, solar panels and a highly effective building envelope that reduces heating and cooling requirements.

THE PROJECT EXCEEDED EXPECTATIONS, INCLUDING:

- First listed building certified BREEAM 2011 Outstanding and BREEAM Office Development of the Year 2014 – exceeding The Crown Estate’s minimum target of BREEAM Excellent
- 100% construction waste and 98.5% demolition waste diverted from landfill – exceeding BRE’s Exemplary level benchmark of 90% for non-demolition waste and 95% for demolition
- Considerate Constructors Scheme Gold Award 2015 and 45/50 score – exceeding The Crown Estate’s 40/50 target and outperforming industry 36/50 average
- 39% better than Part L Building Regulations for efficiency – exceeding the 20% project target and supporting the Greater London Authority’s renewable energy aspirations
- 50% recycled potash in concrete – twice the level expected for BREEAM Excellent
- 47% targeted water reduction thanks to highly efficient sanitary ware
- 382m³ reduction in construction waste, making the project a top 25% performer and saving 64 waste skips
- Over 80% of structure retained, cutting materials use and costs, whist delivering grade A space
- Energy Performance Certificate A
- Over 80% let within eight weeks of completion – including attracting occupiers who were under offer elsewhere

Additional measures have been introduced to ensure the building’s sustainability potential is realised during operation, including Green Lease clauses and extensive energy and water metering. All occupiers have signed up to report energy consumption to BRE for three years and to specify low VOC finishes, Green Guide A-rated floors and office equipment with high sustainability credentials in fit-outs.

ABOUT THE CROWN ESTATE

The Crown Estate is a leading UK real estate business with a portfolio that includes Regent Street and much of St James’s in central London, regional retail and leisure assets, rural and strategic land as well as offshore wind in its capacity as manager of the UK seabed. It is currently investing £1.5bn across Regent Street and St James’s to deliver high quality retail, office and leisure space, as well as improved public realm, in this world-class location.

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