Goodman

PURFLEET 343

SUSTAINABLY DESIGNED

Purfleet Commercial Park, Thurrock, RM19 1NS

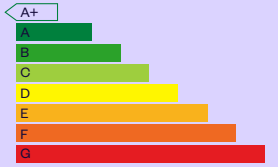
FUTURE-READY LOGISTICS SPACE

Goodman has a track record of sustainable design, development and innovation.

Our properties are designed to respond to changing customer needs and reflect our commitment to reducing energy use, improving efficiency and maximising the sustainable use of resources.

This guide provides an overview of the features included at Purfleet 343 – from our fabric-first design approach, to our investment in on-site renewables.

STANDARDS AND ACCREDITATIONS



Energy Performance Certificate (EPC)

We implement the requirements of the Energy Performance of Buildings Directive and assess the operational energy performance of all new buildings.

EPC A+ (score of -3)

BREEAM®

★★★★☆

BREEAM 'Excellent' rating (Shell and Core New Construction 2018 Industrial) – Design Stage

78.1% BREEAM score

FABRIC-FIRST DESIGN

‘Fridge ready’ cladding system for chilled and ambient storage

The highly insulated CA Twin Therm® Chronus® Ready roof and wall cladding – with U values of 0.35w/m^2K (walls) and 0.23w/m^2K (roof) – can be adapted with ease to meet customer requirements for chilled space as low as 0°C, eliminating the requirement for a ‘box within a box’ design.

The system can facilitate an easy change to chill store with quick release external roof lights, allowing the voids to be filled with insulation, eliminating solar gain and improving the thermal performance of the roof.

Superior air tightness

The building’s excellent thermal performance ensures air tightness far in excess of the Building Regulations requirement. With a rating of 1.15$m^3.h^{-1}.m^2$@50Pa, this enhanced air permeability leads to improved energy conservation.

Carbon neutral building envelope

The Tata Steel CA Twin Therm® Chronus® Ready system with Confidex Sustain® guarantee makes the building envelope carbon neutral – a first in the world. Tata also provides full traceability and composition information for all elements of the pre-finished steel and cladding system.

Curved roof

Whilst providing the same clear height to haunch as a traditional pitch roof, the curved roof has a lower ridge height with less volume to heat/cool. This leads to energy savings and reduced running costs.

Maximising rooflights

12% of the roof area features rooflights that provide natural daylight into the building.

Hi-reflective liner

The paint on the roof and wall cladding's inner liner panel is a brighter white, providing improved reflection properties. This results in less need for artificial light and contributes to reduced running costs.

Anti-sun tinting to windows

Minimum G values and light transmittance values have been specified to prevent excessive solar gain while allowing sufficient natural daylight through. This helps to reduce lighting and cooling costs.

LOW CARBON DESIGN

Embodied carbon emissions were assessed and reduced at the design stage, with elements of the building fabric accredited as carbon neutral to create a carbon light building. The remaining embodied carbon – from 'Cradle to Practical Completion' – is then offset through accredited schemes.

Solar photovoltaics (PV)

Purfleet 343 features a rooftop array of solar PV, helping to offset the building's power needs.

There is the opportunity to purchase the solar energy generated, reducing operating costs and contributing to sustainability goals.

995kWp
system

SolarWall®

The solar air heating system provides free heating to supplement the office heating system. With a modification, this can be used in the warehouse or used for cooling with additional plant. The dark barcoding of the cladding is designed to absorb the maximum sunlight, with the building's southern elevations best placed to capture the full effect:

+ SolarWall area - 75m^2
+ Estimated annual energy savings - 27,300kWh
+ Estimated annual CO^2 savings - 6.12tCO^2e

Solar thermal heating

Used to provide hot water, this is generated by a roof-mounted solar thermal panel, delivering hot water to the core areas of the building.

INVESTING IN RENEWABLES

ACHIEVING GREATER ENERGY EFFICIENCY

Low NOx boiler

An extremely efficient low NOx boiler is used as a back-up to the solar thermal hot water system. Maximum NOx emissions are not to exceed 24mg/kWh and an efficiency greater than 85% can be achieved at full output, with seasonal efficiency greater than 95%.

VRF / VRV comfort cooling to the offices

This harnesses the unwanted heat from areas that require cooling and either stores it or transfers it to rooms that require heating. By using recovered ambient heat energy rather than heating cold air from outside, the day-to-day running costs of a VRF/VRV system with heat recovery technology are much lower than other alternatives. Over the lifetime of the system, significant savings can be made and with lower power consumption, these systems are also more environmentally-friendly.

Seasonal commissioning

Seasonal commissioning of mechanical and electrical systems within the first 12 months of occupation ensures efficient running and keeps costs at a minimum.

Electric vehicle (EV) charging points

The property features EV charging points, with infrastructure to add further charging points to car parking bays and HGV parking spaces:

12 external car charging points

(4 x 3.2kW, 4 x 7kW and 4 x 22kW)

LED lighting

LED lighting is used throughout the property. This includes office lighting with movement and daylight sensors, external lighting controlled by a timeclock – enabling the lighting to come on / off at certain times – and LED dock lighting. The building's passenger lift is also electrically efficient, operating in a 'standby' condition when idle, with all lighting and displays being LED lit.

Smart meters

Smart meters are installed to monitor energy and water use by area and by floor. Data access and analysis is provided via a Cloud-based system, providing customers with behavioural insights to maximise operational efficiency.

SUSTAINABLE MATERIALS

Carpet and ceiling tiles

Ceiling tiles in the office areas are made with a high percentage of recycled content, while the carpet tiles feature a bio-based backing and are certified as carbon neutral.

Timber

All timber products come from sustainable sources, with Chain of Custody Certification provided by the Forest Stewardship Council (FSC).

QUALITY, LONGEVITY AND END-OF-LIFE RECYCLING

Construction materials and component choices have all been made in-line with the BRE's Green Guide to Specification to reduce the building's environmental impact.

Materials have been chosen for their durability but also their ability to be reused at the end of their operational life:

+ The roof and wall cladding system has a 25-year system guarantee and 40-year guarantee for the coating
+ When physically obsolete, materials specified are fully-recyclable (e.g. the steel frame), with many products having dedicated take-back schemes.

WATER CONSERVATION AND BIODIVERSITY

Water saving devices

This includes leak detection on the incoming water supply, waterless urinals, low flush WCs and sensor activated touch-free taps to wash hand basins.

Rainwater harvesting

5,000 litre tanks provide grey water flushing to WCs and watering points for landscape maintenance and bin-store cleaning.

Sustainable urban drainage system

Underground drainage is attenuated, slowing the rate of storm water entering the drainage system and therefore reducing flood risk. All surface water run off goes through an interceptor prior to discharge off site.

Biodiversity net gain

The south west corner of the site features a pond designed for water attenuation. This area has been seeded with species-rich grassland and the waterline supplemented with aquatic species to encourage natural habitats to be formed and flourish.

CONTACT US

Goodman

ENQUIRE NOW

George Glennie
Development Director
george.glennie@goodman.com
07500 331435

Chris Beamer
Associate Director, Development
chris.beamer@goodman.com
07500 779249

CUSHMAN & WAKEFIELD

Richard Evans
richard.evans@cushwake.com
07907 094646

Chris Knight
chris.c.knight@cushwake.com
07872 822528

Patrick Mooney
patrick.mooney@cushwake.com
07920 451369

JLL

Sophie Kettlewell
sophie.kettlewell@jll.com
07801 667586

Tom Watkins
tom.watkins@jll.com
07917 093167

Lambert Smith Hampton

Akhtar Alibhai
aalibhai@lsh.co.uk
07909 684801

Richard Flood
rflood@lsh.co.uk
07754 674580

Charis Lovegrove
clovegrove@lsh.co.uk
07566 794225

0203 426 0800 | purfleetcp.com | uk.goodman.com