



ENVIRONMENTAL STANDARDS STATEMENT

Project: Erection of 10 Class B8 Units with associated elevational alterations

Address: Collingham Street, Manchester, M8 8RQ

Job No. -

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P01	17/03/23	Issued for Planning

COLLINGHAM STREET

INTRODUCTION

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- The site plan illustrates a proposed 10-unit residential development located at 10 Collingham Street, Sydney. The development is a rectangular building divided into 10 units, each with a 134 sqm area. The building is situated between Collingham Street to the north and a 2.4m high profiled mesh Procter fence to the south. The site is bounded by a 2.4m high profiled mesh Procter fence to the west and a 2.4m high profiled mesh Procter fence to the east. The plan also shows the location of the existing 10-unit residential development at 10 Collingham Street, Sydney, and the proposed 10-unit residential development at 10 Collingham Street, Sydney. The plan includes a north arrow and a scale bar.

Figure 1. Proposed Site Plan

2. The proposed site plan (Fig. 1) illustrates the positioning of the building and ground floor arrangement on site. The development will ensure ways to minimise CO₂ emissions in both the construction and occupation performance of the development. This can be presented as the following measures:

- Ensuring quality in the thermal performance of the materials
- Avoiding cold bridges in the initial design process
- Reducing the possibility of infiltration
- Rigorous Site preparation in regard to efficiently phasing the construction of the development
- Ensuring quality services for the end - user to reduce overall demand of CO2 emissions
- Increasing a reliance on public transport networks to reduce the overall use of motor vehicles for staff.
- Low energy internal appliances to reduce overall pressure to CO2 emissions

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PROPOSED CONSTRUCTION SPEC

1. In this section we aim to further clarify the quality of certain elements to the proposed development, reviewing the materials U-value and ways in which the development will reduce overall CO2 emissions through quality design.
2. To determine the thermal performance of a building, a u-value is incorporated to evaluate the level of heat loss within a material. A low u- value within a material illustrates a slower transfer of heat resulting in a more efficient building product.
3. Heat loss generally occurs within the following construction elements –

1. Lower floor levels

2. External walls

3. Roofs

4. Doors Junctions

5. Uncontrolled Ventilation
4. The following information concludes the ambitions in achieving an energy efficient building and ensuring quality in design. The resulting targets will exceed current building regulations.

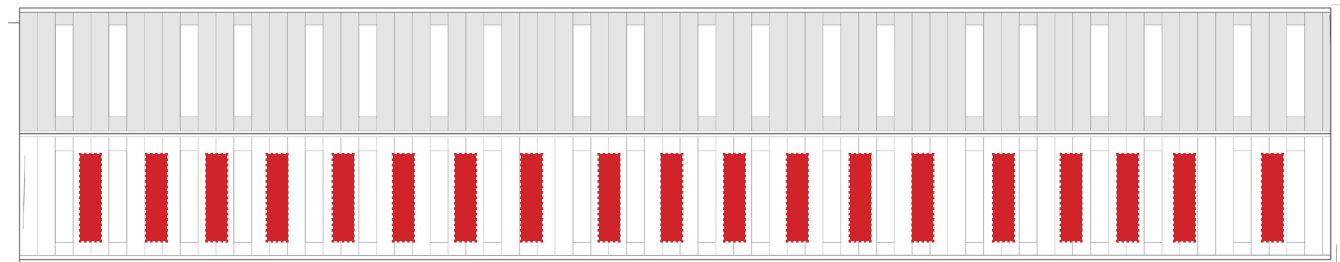
CONSTRUCTION COMPONENT

Ground Floor	U=0.18 W/m2K
External Walls	U=0.20 W/m2K
Roof Construction	U=0.16 W/m2K
Door Junctions	U=1.6 W/m2K
Lighting	100% 'Low E'
Ventilation	Centralised Whole Extract
Thermal Bridge	Certified details from Manufacturer

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SOLAR PANELS

1. Solar Panels will be located on the roof to help reduce the Electricity demand within each property and influence the occupants to closely monitor their energy usage. The solar panels are recently more affordable than ever and offers mitigations to reduce overall carbon footprint of the development.



Solar panels locations in red

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OTHER MEASURES

1. **Making full use of the vertical space.**
The warehouses will be made to make the most of the vertical space that is within each unit. This is to make it as efficient as possible.
2. **Rooflights**
Each unit will be equipped with a series of rooflights which will make the most of natural light. The Carbon Trust estimates that lighting accounts for between 65% and 95% of energy use in ambient warehousing. Therefore good quality lighting is essential for safe operation. This will also help increase worker productivity and wellbeing.
3. **Sensors**
Each unit will be equipped with night time and weekend shut down routines. This will help reduce the energy cost of each warehouse unit. Modern sensors are effective, even with the use of forklifts, and allow infrequently used areas to only use lighting when required. Sensors can achieve savings of 30% or more on lighting costs and can be zoned by aisle or area depending on the individual requirements of your operation.
4. **High Quality Insulation**
The standard of insulation and how airtight the building is will be prioritised.
5. **Painting internal walls white**
Painting walls white and installing windows to introduce natural light will improve light levels while reducing energy.
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Careful consideration will be given to options for heat recovery and efficient heating measures will be explored.
7. **Cycle Storage**
Each warehouse unit will incorporate storage space for bicycles. This will encourage the employees to cycle to work.