# Report on Proposed Air Conditioning Installation

**5th September 2008**

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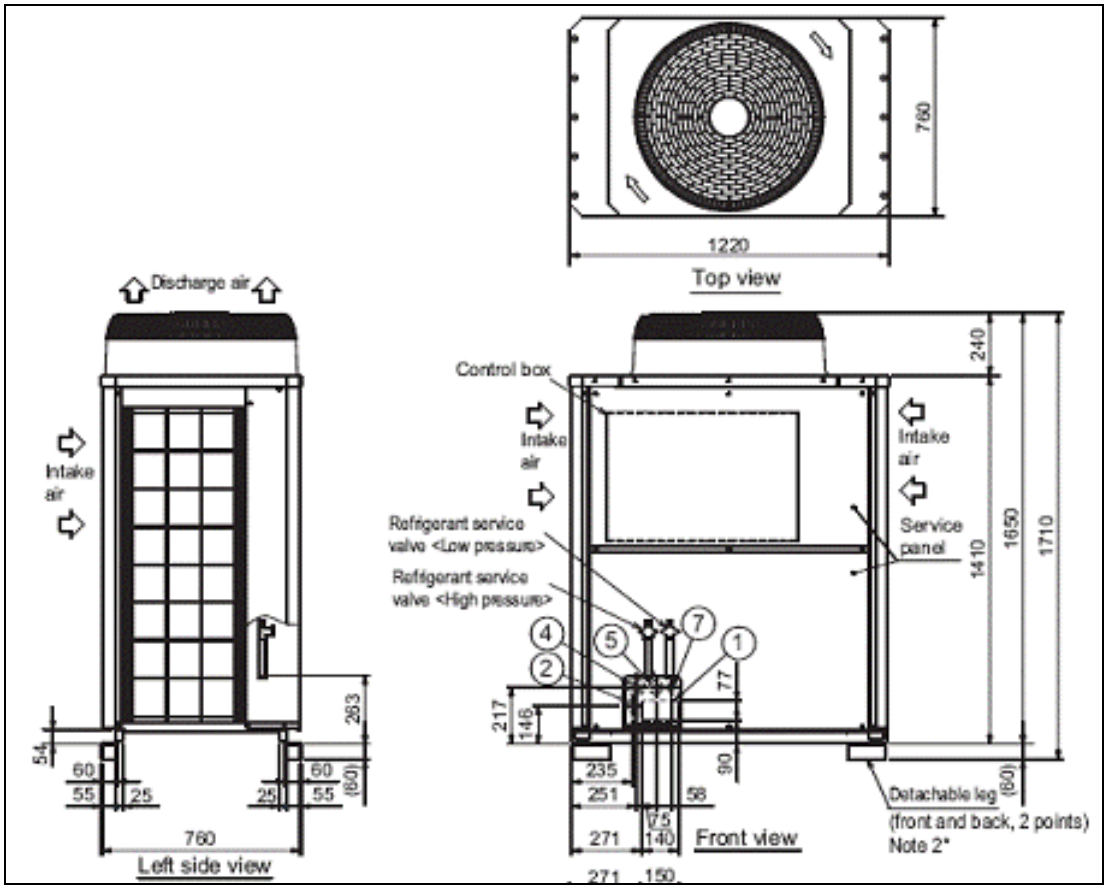
## Location.
18 – 20 Fountain Street.
Manchester.

## Client.
Bruntwood Estates.

## Air Conditioning Manufacturer & Models.
Manufacturer - Mitsubishi Electric
Model – PURY P350YHMA ( 2 off )

## Location.
The two externally mounted air cooled condensing which are proposed to be installed on the roof of 18 – 20 Fountain Street ( as detailed on drawing L(20)012 ). The roof is surrounded by a large parapet wall on all sides and therefore the units are not visible from ground floor level.

## Dimensional Data.

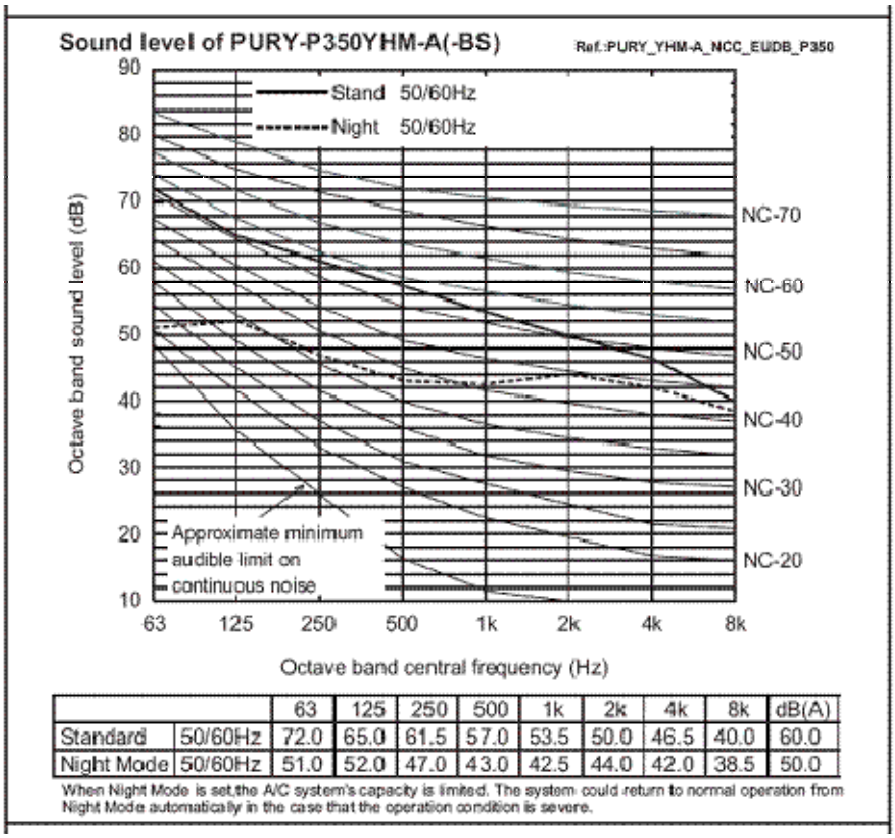


**Requirement.**
There are a total of two air cooled condensers being installed side by side. These units are required to be installed as part of a system which will provide both heating and comfort cooling to the office space directly below. These “condensing units” require to be located externally to reject the heat removed from the building by the associated indoor units. The location has been chosen for the following reasons.

- The interconnecting refrigeration pipe work between indoor and outdoor unit should be kept as short as possible to maximise energy efficiency.
- There are no restrictions to the air flow from the condensing units ( which will effect efficiency ).
- Good access for Service and Maintenance.
- Safe location.
- Minimal visual and acoustic impact to adjacent residents.

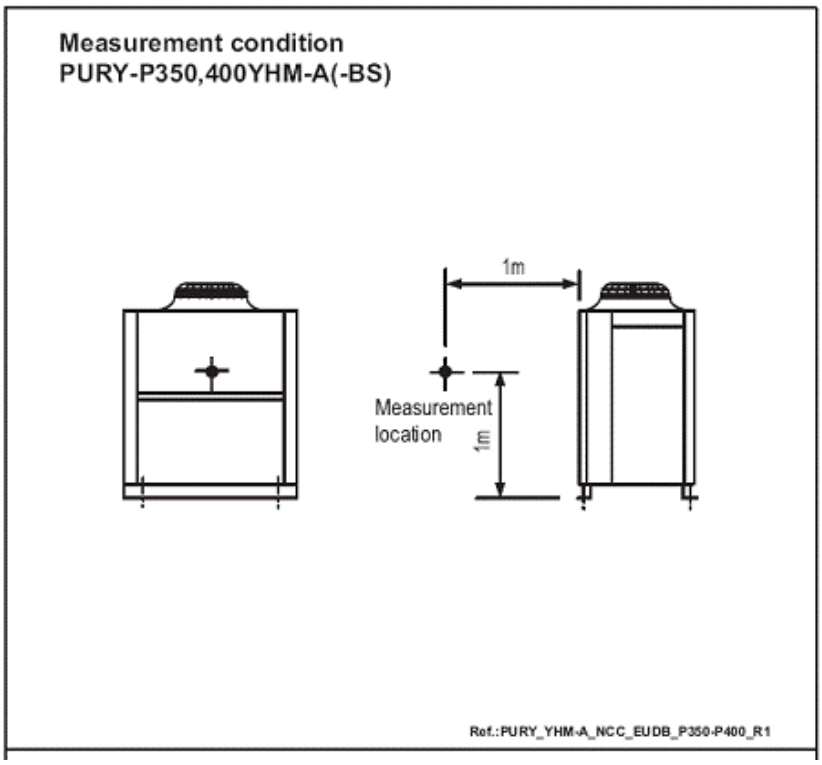
**Colour.**
The colour reference is MUNSELL 5Y 8/1.

**Acoustic Information**
Below is the acoustic data published by manufacturer for one unit.




| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) |
|---|---|---|---|---|---|---|---|---|---|---|
| Standard | 50/60Hz | 72.0 | 65.0 | 61.5 | 57.0 | 53.5 | 50.0 | 46.5 | 40.0 | 60.0 |
| Night Mode | 50/60Hz | 51.0 | 52.0 | 47.0 | 43.0 | 42.5 | 44.0 | 42.0 | 38.5 | 50.0 |

When Night Mode is set,the A/C system's capacity is limited. The system could return to normal operation from Night Mode automatically in the case that the operation condition is severe.




The acoustic addition of the given sound pressure levels require 3 dB to be added to give the combined sound pressure levels.

**Photographs**
























city Tower

**Proposed Location**

