



Client: The Blackburn Partnership, Fernwood House, London Road, Waterlooville, Hampshire, PO7 7HG

Site: Fernwood House, London Road, Waterlooville, Hampshire, PO7 7HG

Date: 19th February 2020

Project: Mitigation Measures Implemented by the client for noise control and overheating

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The project involves the installation of 8 x residential dwellings at 1st floor level at the above address. This document is in addition to the Noise Impact Assessment 17352 undertaken on 14th to 15th June 2019 to establish the noise levels apparent at the site.

The report listed above clearly indicates the required levels of noise reduction for the site and lists suitable mitigation measures. In addition to this report, the client has stated that the following mitigation measures will be applied to all necessary dwellings, windows and ducting.

1. MVHR units with summer bypass installed:

A Vent-Axia Sentinel Kinetic Plus system will be installed to all required units, these units will be fitted with summer bypass mode to help with cooling in the summer months. MVHR units are an effective measure to ensure the dwellings can be adequately ventilated without having to open the windows.

2. Internal Window Blinds fitted to all required windows:

The client has stated that blinds will be fitted to all necessary windows and will form an integral part of the ventilation strategy. These will ensure the dwellings can remain shaded during the summer months and reduce the amount of sunlight penetrating the dwellings.

3. Glazing Installed:

The client has installed a glazing system comprising of 6.8mm laminate glass, 16mm cavity, 4mm annealed glass. This system offers a sound reduction of 37dB. This will meet the requirements for the L_{Aeq} & L_{Amax} values as shown in the noise assessment. A level of 37dBA is a very high level of sound reduction and will ensure a suitable internal environment. The literature has been supplied directly by the client for the glazing.

4. External ducting acoustically encased:

All external ducting will be encased to reduce the noise breakout of these elements. It must be stated that the glazing was listed to ensure protection from the noise emissions of the plant so this will also help to ensure it will not have an adverse impact on the proposed dwellings. It is recommended that the following detail be used.

- Apply an acoustic duct wrap to the extraction – something similar to ‘siderise DWX Acoustic barrier’ either DW5P or DW10P. See link. This can be applied to the ducting before any further encasement works

<https://www.siderise.com/cms-data/product-downloads/SIDERISE%20DWX%20Ducting%20Acoustic%20Barrier.pdf>

- Fix 70-100mm timber frame to building using anti-vibration mounts (similar to EP anti-vibration wall mounts from Custom Audio Designs).
- Place RW3 mineral wool between timber studs
- Fix sinit weatherboard (or similar) to the timber studs
- Fix Tecsound SY50 membrane to boards
- Apply cladding to match existing to the outer layer of the system

Acoustic sealant can be applied to each layer during the installation and great care must be taken when fixing the above system. It is anticipated that the extraction system will require regular maintenance and cleaning so this needs to be factored into the design.

It is anticipated that the robust and comprehensive measures listed within this document will ensure an adequate internal acoustic criteria for the proposed residents and a suitable compromise between the acoustic performance and thermal comfort with the proposed measures for both ventilation and overheating as listed above.