

NOISE MEASURES

CHANGE OF USE OF FIRST AND SECOND
FLOORS
FROM OFFICE SPACE TO
2 No. RESIDENTIAL APARTMENTS

No. 25 – 27
REGENT STREET
HINCKLEY LE10 0AZ

REF. 784-RSH-SD (A)



Architectural Vistadesigns Ltd

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1.0 INTRODUCTION & PURPOSE

- 1.1 The supporting document is to support the submission for a Full Plans application within a Conservation area for Change of Use from office space on the first and second floors to create 2 No. apartments at No. 25 – 27 Regent Street, Hinckley LE10 0AZ.
- 1.2 The document outlines details for protecting the proposed dwellings from noise from external noise and noise from the commercial premises at ground floor.

2.0 NOISE MEASURES

2.1 Windows:

The existing windows are of single glazing with minimal thermal properties and offer minimal noise control due to the thickness of glass.

The existing windows will be upgraded to double glazed window units, which will straight away upgrade the windows and provide better acoustic properties to control the transmission of noise from external noises and improve the thermal property of the flats.

By providing Double glazing this reduces the sound from outside as the two panes of glass and the gas between them absorb the sound vibrations and dampen the transmission of sound.

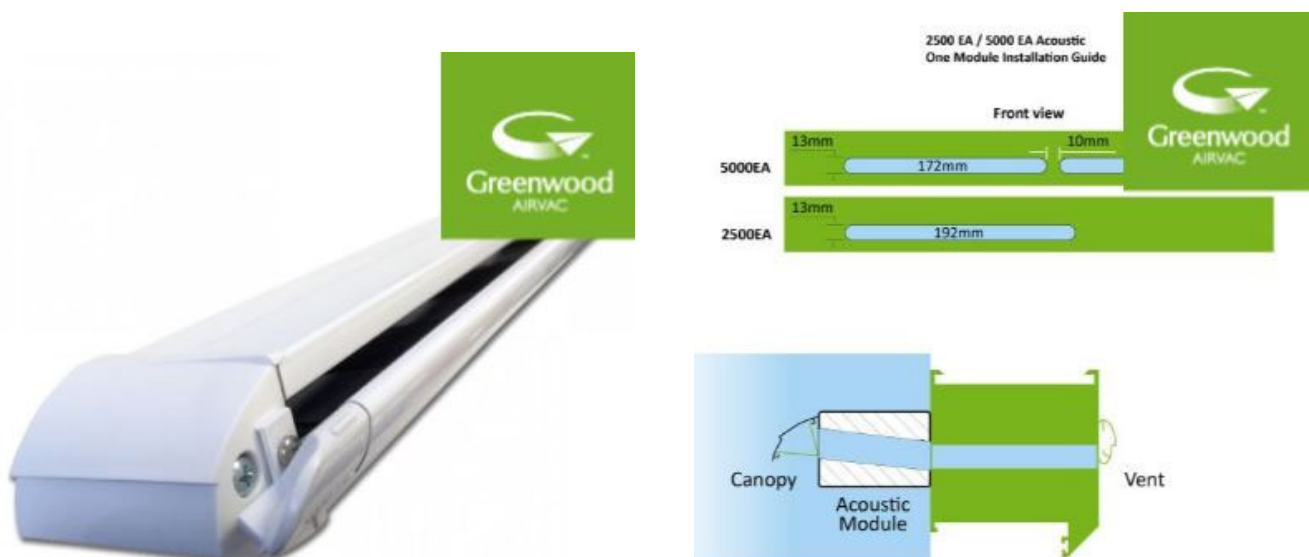
It is expected that the typical double glazed window can reduce sound levels by as much as 35 Decibels.

2.2 Acoustic Vents:

As standard practice to meet the Building Regulation standards the windows require Air vents, which can promote the passage of sound should the Air vents be in an open position.

It is recommended that Acoustic vents will be incorporated into the windows to control the passage of sound such as a Greenwood Accoustic Vent as per below details (subject to final fitting with window manufacturers advice):

- Provides 2500mm² equivalent area from a single vent
- Available in 2 sizes:
This vent **2500EA** - 250mm (L) x 25mm (H) x 70mm (D) Internal/86mm (D) External
also available as [5000EA - 412mm](#) (L) x 25mm (H) x 70mm (D) Internal/86mm (D) External
- **2500EA** routing slot size: 192 x 13mm
- Achieves Building Regulations' EA requirements
- Smallest acoustic window vents on the market
- Offers unbeatable acoustic performance - up to 45dB(A)
- Modular acoustic components provide a range of acoustic performances and flexible installation options
- Excellent airtightness performance with upward air deflection to reduce the risk of draughts
- Manufactured from Aluminium Alloy
- Only available in white finish
- Sets comprise of: **EA vent + 1 external acoustic module** – providing noise reduction with discreet internal aesthetics. **1 EA vent + 2 acoustic modules** (for internal and external install) – providing maximum noise reduction



2.3 Existing floor between proposed flats and commercial unit:

The proposed options have been considered in controlling the transfer of noise between the commercial unit below but it is worth noting that the commercial unit is being used as an office during daytime only with minimal noise generated from the unit.

Existing floor structure cavity to incorporate Knauf acoustic roll as per below specification:

- Brand: Knauf
- Coverage: 11m², 15m², 15.6m², 24m²
- Length: 9.17m, 10m, 12.5m, 13m
- Thermal conductivity: 0.032 W/mK, 0.035 W/mK, 0.039 W/mK
- Thickness: 25mm, 50mm, 75mm, 100mm
- Width: 600mm
- Fire-resistant: Yes
- Sound-proof: Yes



Additional sound proofing to be applied over the existing substrate and under carpets by using an acoustic mat:

Regupol 4515 multi 3mm is a high performance impact noise reduction matting, which can be laid directly beneath carpet, luxury vinyl and laminate flooring types (alongside a suitable underlay).

The impact rating is 18dB



Additional 15mm Gyproc Soundbloc fixed to underside existing ceiling line of the commercial unit, which to control any potential fire spread but equally will help with controlling noise transfer.

Product Data Sheet

Gyproc® SoundBloc F 15mm



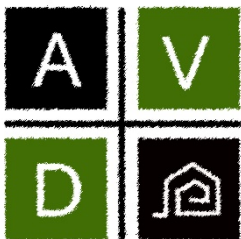
Gyproc SoundBloc F 15mm is a plasterboard with a dual performance higher density core for noise insulation and high fire performance.

Where to use

Use it in wall and partition systems where both additional levels of fire and acoustic performance are required in both public and private sector buildings such as schools, hospitals, student accommodation and offices.

Certifications

Environmental Product Declaration (EPD) available
[Click here.](#)



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