

Plans Drawn
4 Swallow Close,
Stalybridge,
SK15 3LU

1 August 2025

Ref: PA1139 10 Middleton Gardens, Manchester M24 4DF

1.0 Introduction

Peninsular Acoustics Ltd has been commissioned by Plans Drawn to provide an acoustic construction review for the proposed separating floor between ground floor commercial and first-floor residential accommodation at 10 Middleton Gardens, Manchester M24 4DF.

This review is based on the information provided by the client, with no site visit possible. The design is based on a worst-case timber floor starting point, with assumed solid brick external walls. At detailed design stage, the starting point should be reviewed with a site visit and specifications adjusted if required prior to construction to ensure proposed criteria is achieved.

The construction review aims to satisfy the requirements of Approved Document E (ADE) 2003¹ by providing design guidance to achieve the relevant acoustic performance criteria, ensuring adequate protection against sound transmission from the commercial unit into adjoining residential areas. Please see the following sections:

- Section 2 – Approved Document E 2003
- Section 3 – Site Layout
- Section 4 – Separating Floor

The following drawings received from Plans Drawn, dated May 2025 have been reviewed for this assessment:

- Drawing no. 1 'Existing Plans Layouts' (Ground Floor, First Floor, Second Floor) Project No. MG10;
- Drawing no. 2 'Existing Elevations' Project No. MG10;
- Drawing no. 3 'Proposed Plans Layouts' (Ground Floor, First Floor, Second Floor) Project No. MG10; and
- Drawing no. 4 'Proposed Elevations' Project No. MG10;

¹ The Building Regulations 2010: Approved Document E '*Resistance to the Passage of Sound*' (2003 edition incorporating 2004 and 2010 amendments)
PA1139 10 Middleton Gardens
Construction Design

2.0 Approved Document E

ADE requires all dwelling houses and flats formed by material change of use to provide the sound insulation performances between party walls and floors presented in Table 2.1.

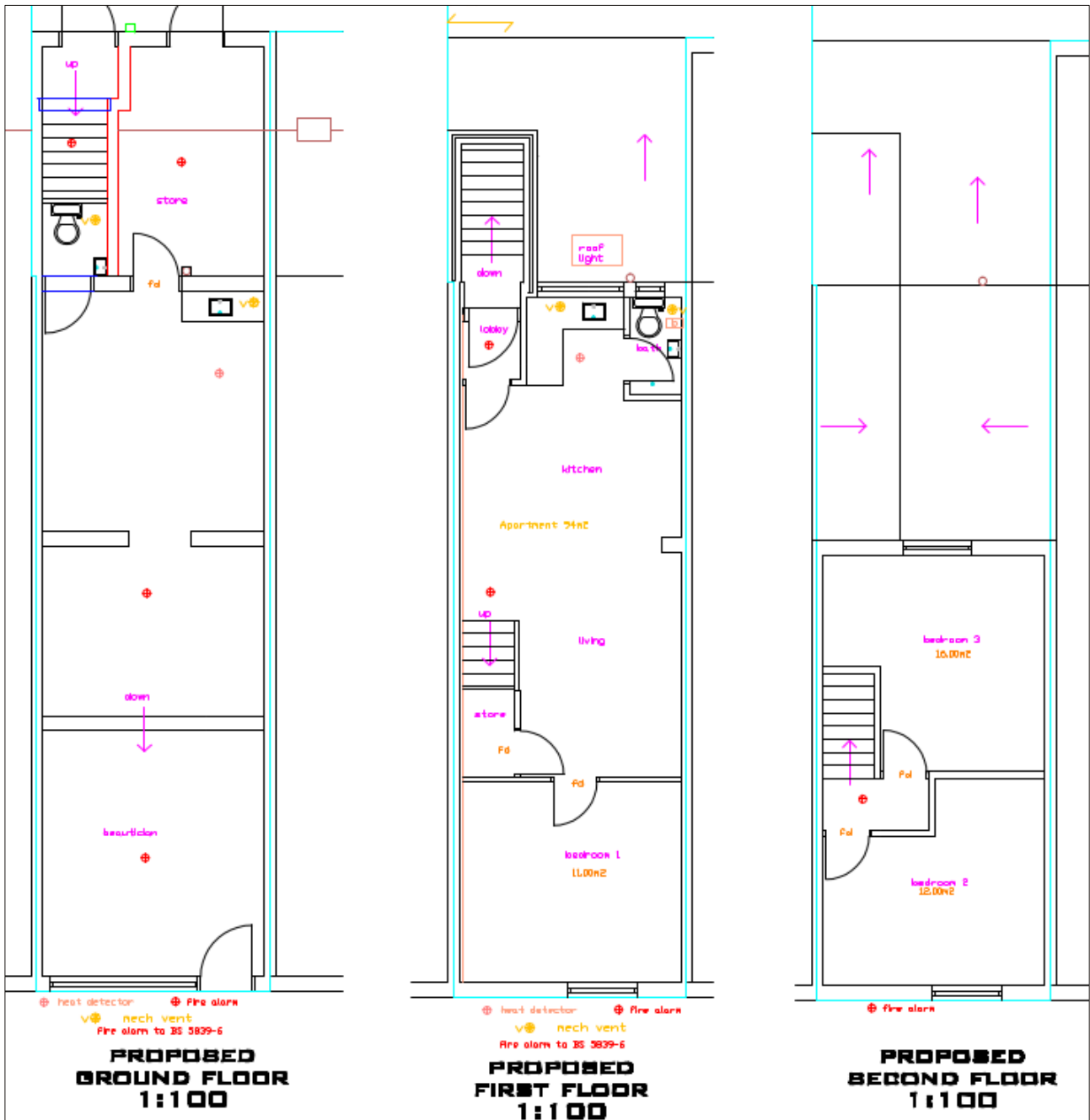
Table 2.1: Table 1a of ADE Part E

Separating Element	Airborne sound insulation (Minimum values)	Impact sound insulation (Maximum values)
Walls	43 dB $D_{nT,w} + C_{tr}$	-
Floors		64 dB $L'_{nT,w}$

When residential accommodation is atop commercial units, impact testing is not typically required. However, while not explicitly outlined in ADE, separating elements between residential and commercial spaces should typically achieve an enhanced performance standard. For the purpose of this assessment a +10 dB improvement on standard building regulations airborne sound insulation performance i.e., 53 dB $D_{nT,w} + C_{tr}$ is proposed.

The proposed layout for the scheme is shown below:

Figure 3.1: Proposed layout



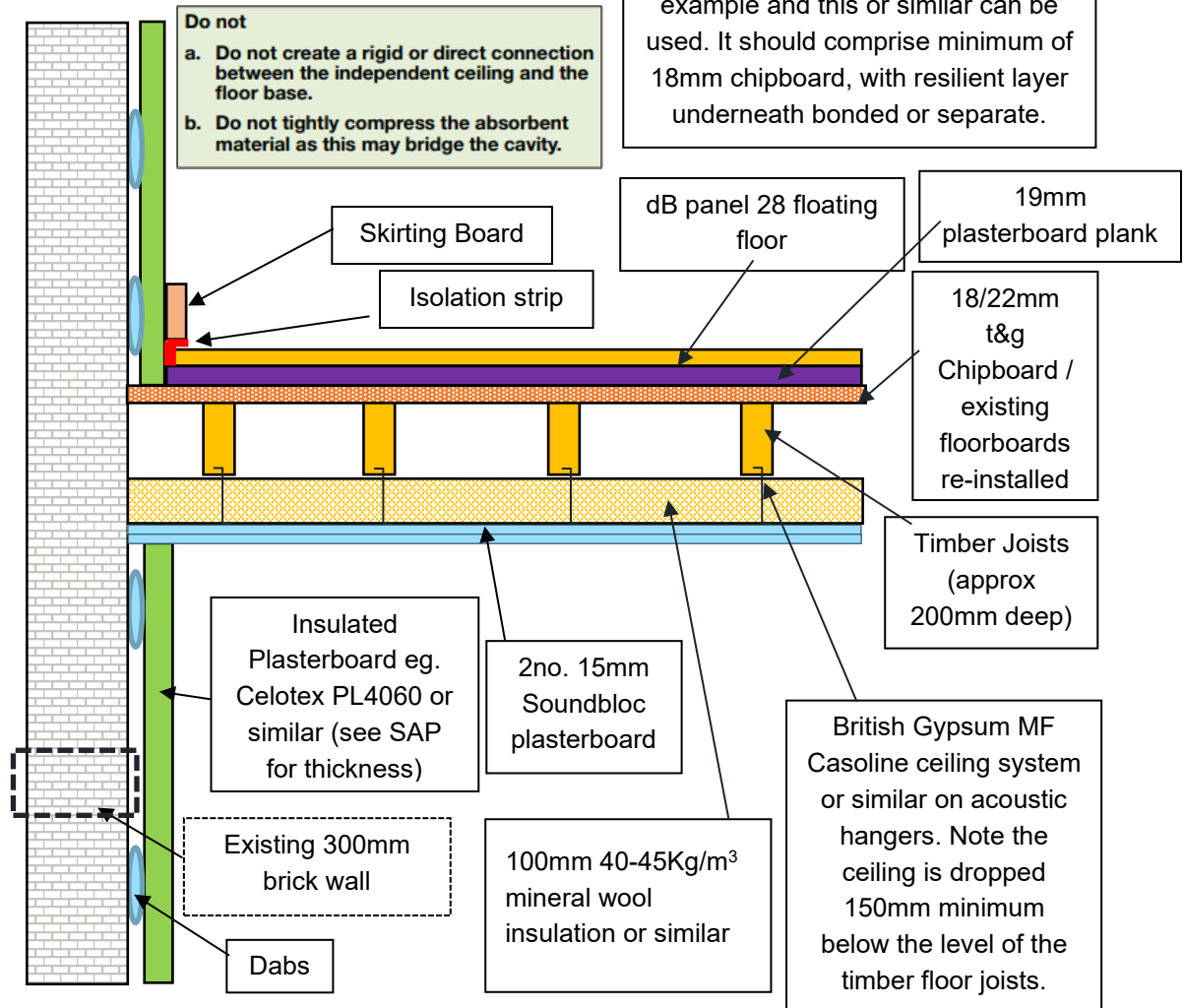
4.0 Separating Floors

4.1 Separating Floor with External Wall Junction

The separating floor below is expected to achieve building regulations + 10 dB provided the construction is not limited by flanking sound.

Separating Floor Junction with External Wall

(Not to Scale)



**Please note we are acoustic consultants and not structural, energy or fire consultants. Designs must be checked with other consultants prior to onsite construction.*

*** Thermal wall lining on dabs has been used as an example.*

**** If flanking sound via walls is an issue, it may be necessary to install independent wall linings at either or both ground and first floor level to mitigate the problem.*

Should you have any further questions, please do not hesitate to contact me.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'J Phillips'.

Joel Phillips AMIOA, PGDip, BSc(Hons)
Acoustic Consultant