#### PROJECT TECHNICAL MEMORANDUM

JOB TITLE	:	47-49 Goodge Street	
PROJECT NO	<b>COJECT NO</b> : 25987		
DATE	:	6 September 2018	
FROM	:	Gareth Evans	
ISSUED TO	:	k.kenny@fandt.com	

Hann Tucker Associates

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## **RE: PLANNING CONDITION 4**

### 1.0 Introduction

A change of use is proposed at 47-49 Goodge Street, London. The future development will comprise residential dwellings located above a first floor office.

As part of the planning permission, the Local Authority have imposed Planning Condition 4 with regards to sound insulation between the office and residential dwellings.

Hann Tucker Associates have been commissioned to review the proposed separating floor build-up and comment on its suitability.

Our findings and recommendations are presented herein.

#### 2.0 Planning Condition 4

As part of the planning permission for the proposed scheme, Camden Council have imposed the following Planning Condition:-

"4 Prior to commencement of the development, details shall be submitted to and approved in writing by the Council, of the sound insulation of the floor/ ceiling/ walls separating the first floor commercial parts of the premises from noise sensitive premises. Details shall demonstrate that the sound insulation value  $D_{nT,w}$  and  $L'_{nT,w}$  is enhanced by at least 10dB above the Building Regulations value and, where necessary, additional mitigation measures are implemented to contain commercial noise within the commercial premises and to achieve the criteria of BS8233:2014 within the dwellings/ noise sensitive premises.

The details as approved shall be implemented prior to occupation of the development and thereafter be permanently retained."

# 3.0 Building Regulations Requirement E1

The normal way of satisfying Requirement E1 is to build separating walls, separating floors and stairs that have a separating function, together with the associated flanking construction, in such a way that they achieve the sound insulation values shown in the following table.

Table 1a:	Dwellings – performance requirement stairs that have a separating function	nts for separating walls, s n.	eparating floors, and	
		Airborne Sound	Impact Sound	
		D <sub>nT,w</sub> + C <sub>tr</sub> dB	L <sub>nT,w</sub> dB	
		(Minimum values)	(Maximum values)	
Dwellings formed by material change of use				
Walls		43	-	
Floors and	stairs	43	64	

However, to achieve the necessary requirements of the Local Authority, the floor construction separating the first floor office and residential dwellings above must achieve at least 10dB better than the standards shown in the table above.

#### 4.0 Details

The proposed floor build-up comprises the following:-

- Isocheck Ultimo (24mm thick)
- Existing floor boards with 18mm proprietary deck
- Isocheck barrier matt 10kg/m<sup>2</sup> (5mm thick)
- New timber battens bolted to existing
- 2 x 100mm Rockwool in 440mm cavity
- Proprietary metal frame on Isocheck 70mm acoustic hangers, min 150mm void
- Isocheck Isowave 23
- 2 x 15mm plasterboard

The proposed floor build-up should be capable of achieving the required sound insulation performance, provided that flanking is suitably controlled.

To adequately control flanking transmission, we would recommend that the wall lining on 1No. side of the separating floor (i.e. the office or residential dwelling) comprise 2 x 15mm plasterboard on a fully independent framework.

Yours sincerely

95

Gareth Evans for HANN TUCKER ASSOCIATES