

Our Ref: 5920/PT

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Ross Nichols
Baxter & King Ltd.
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Dear Ross,

BLYTH ROAD, HAYES, UB3 1BY PLANNING CONDITION 10 – COMMERCIAL TO RESIDENTIAL SEPARATION

We write to assist with the discharge of Planning Condition 10 for the mixed use development at Blyth Road, Hayes.

We understand there is to be one office unit (Class B1) approximately 293m² at ground and first floor level within Block C.

The following wording is understood to be applicable to the relevant Planning Condition. Planning Condition 10 states:

"The development shall not begin until a scheme for the control of noise transmission between the B1 office space and the adjoining dwellings has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include such combination of sound insulation and other measures as may be approved by the LPA. Thereafter, the scheme shall be implemented and maintained in full compliance with the approved measures."

Since the space is to be used as a B1 office space, high 'source' noise levels are not anticipated to be generated throughout the normal working day.



robustdetails



In response to Condition 10, we write to confirm our understanding of the proposed constructions separating the commercial and residential floors.

Separating Floor

It is understood the general floor construction is as follows:

- Collecta ScreedBoard 20 (decking)
- Collecta Hexatherm XFloor (insulation)
- Fibrefon 8 (resilient layer)
- Minimum 250mm thick, cast in-situ, full density (2400kg/m³, flat concrete slab

Although the office space ceiling is to be installed by the eventual tenant, it is assumed that some form of ceiling will be installed, which is likely to be plasterboard on a metal frame grid. We have therefore assumed this within our assessment.

Based upon similar constructions utilised on previous projects, we would anticipate an airborne sound insulation performance in the region of $D_{nT,w} + C_{tr}$ 55-60dB, which is 10-15dB in excess of the minimum requirements of Approved Document E. An impact sound transmission performance in the region of 50dB $L'_{nT,w}$ is also likely dependent on the final floor finish.

Separating Wall

We propose the following wall construction in order to ensure disturbance to adjacent residents is minimised;

- 2No layers of dense 15mm plasterboard (min density 12.5kg/m³ per board)
- Independent metal 'I' studs
- Void with 100mm mineral wool
- Independent metal 'I' studs
- 2No layers of dense 15mm plasterboard (min density 12.5kg/m³ per board)

The overall wall construction is to be at least 300mm thick.

Based upon similar constructions utilised on previous projects, we would anticipate an airborne sound insulation performance in the region of $D_{nT,w} + C_{tr}$ 50-55dB, which is 5-10dB in excess of the minimum requirements of Approved Document E.

These predicted performances are a significant improvement on the standard constructions employed in many new-build developments and should be considered acoustically acceptable in reducing any potential noise transfer between these differing usage spaces.

We trust the above to be clear and of assistance. If you have any queries, however, please do not hesitate to contact the undersigned.

Yours sincerely,
For RBA Acoustics



Paul Taylor