

Grant Ayres
Berkeley Homes (Oxford & Chiltern) Ltd
Berkeley House, Mill Lane
Taplow
Maidenhead
SL6 0AG

Date: 22nd April 2026
Reference: R10314-25 Rev 0

Dear Grant,

Re: Blocks B and C Vastern Road – Secondary Glazing

We write further in response to RBC's further query which states the following:

"The performances do look very similar, but can they please provide further analysis of the performance across the frequencies taking into account the specifics of the noise source on site (SSE transformers) as we would not want any drop in performance at those frequencies. I note that the two options have different critical frequencies so this should be taken into account if this coincides with dominant frequencies of the noise source."

Internal Noise Criteria

Although none of the planning conditions refer to noise criteria, discussions with Reading Borough Council at the application stage referred to the low frequency criteria in NANR 45 (Ref DEFRA) for noise from the SSE transformers. The limiting noise criteria are shown in Table 1 below.

Sound Pressure Level (dB) per 1/3 Octave Band Frequency (Hz)						
40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz
49	43	42	40	38	36	34

Table 1: NANR 45 Criteria

Source Noise Levels

The source sound pressure levels from the SSE transformers, with cooling fans operating (infrequent higher noise mode, hence worst case) at the nearest window are shown in Table 2, below. When summed together, the values below amount to NR 22 overall.

Sound Pressure Level (dB) per 1/3 Octave Band Frequency (Hz)						
40 Hz	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz
59	66	59	61	61	57	55

Table 2: Cooling Fan SPLs

Internal Noise Levels

Using the source data above, the calculated internal noise level with the 8mm secondary glazing is NR 5.4. For 6mm glass, the resultant internal noise level is NR 5.8; a difference of 0.4 dB is negligible. Both values are significantly lower than the NNR45 threshold of NR 22.

On this basis, the difference in resultant noise level for the two glass thickness (6mm and 8mm) is negligible and therefore the proposed use of 6mm glass is considered acceptable.

I trust the above is in order – please call if you have any queries.

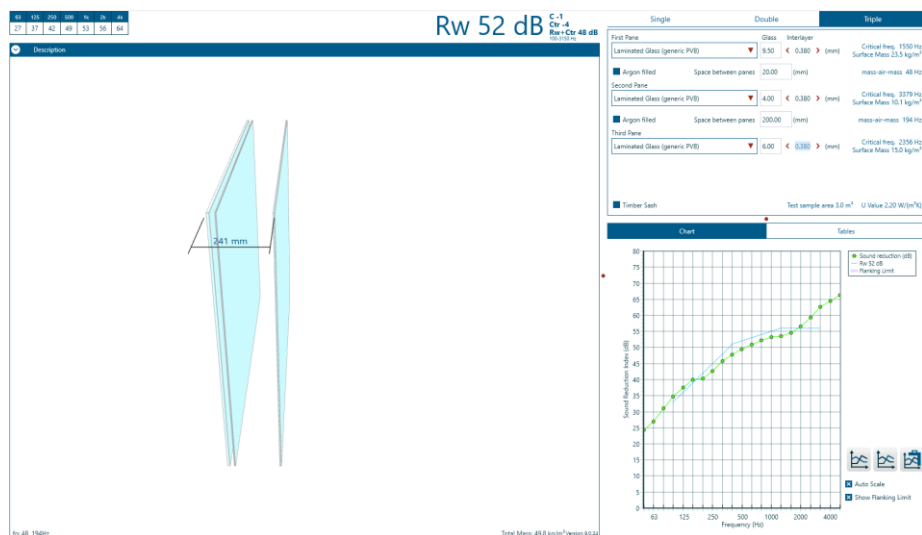
Yours sincerely

For 24 Acoustics Ltd

Steve Gosling BEng (Hons) FIOA FRSA MAES
Principal Consultant

APPENDIX A: COMPARISON OF 6 MM AND 8 MM SECONDARY GLAZING – INSUL V9

6 MM GLASS – 52 dB Rw



8 MM GLASS – 52 dB Rw

