S72 7FJ

Distance	6.5
Barrier	Fully Seen
Heat Pump	Cosy6
Reflecting Surfaces	2
Outcome	42.29
Result	Fail - Planning Required

MCS 020 - Manual Sound Calculator

Assessment Details

Heat pump model is Cosy6 and it is 6.5 metres from the assessment window. There is 2 Reflecting Surface and it is Fully Seen.

The assessment position is one metre perpendicular to the centre of the closest habitable room.

Step	Instructions	MCS contractor results/notes
1	From manufacturer's data, obtain the A-weighted sound power level of the heat pump. See 'Note 1:Sound power level'. The highest sound power level specified should be used	56.5
2	Use 'Note 2: Sound pressure level' and 'Note 3: Determination of directivity' below to establish the directivity 'Q' of the heat pump noise.	Q8
3	Measure the distance from the heat pump to the assessment position in metres	6.5
4	Use table in 'Note 4: dB distance reduction' below to obtain a dB reduction	-18.0
5	Establish whether there is a solid barrier between the heat pump and the assessment position using 'Note 5: Barriers between the heat pump and the assessment position' and note any dB reduction	0
6	Calculate the sound pressure level from the heat pump at the assessment position using the following calculation: (STEP 1) + (STEP 4) + (STEP 5)	38.5
7	Background noise level. For the purposes of the MCS Planning Standard for air source heat pumps 40 dB(A) the background noise level is assumed to be 40 dB(A) Lp.	40
8	Determine the difference between background noise level and the heat pump noise level using the following calculation: (STEP 7) - (STEP 6)	1.5
9	Using the table in 'Note 7: Decibel correction' obtain an adjustment figure and then add this to whiever is the higher dB figure from STEP 6 and STEP 7.	42.29
10	Final Result?	Fail - Planning Required