TABLE 2: USE ONE TABLE FOR EACH ASSESSMENT POSITION TESTED

Date calculation undertaken:

Note: for the purposes of this calculation procedure

- **Assessment position** means a position one metre external to the centre point of any door or window to a habitable room of a neighbouring property as measured perpendicular to the plane of the door or window
- **Habitable room** means a room other than a bathroom, shower room, water closet or kitchen
- **Neighbouring property.** Means any building used for any of the purposes of Class C of the Town and Country Planning (Use Classes) Order 1987 (as amended) (includes dwellings, houses, hotels, residential institutions and houses in multiple occupation) In instances where the air source heat pump would be installed on block of flats, neighbouring property includes flats within the same block of flats (excluding the flat of the "owner(s)" of the air source heat pump

Description of assessment position tested

Heat Pump location is to be on the South elevation to the East side of utility room door at proposed new dwelling (MSDC Planning Ref DM/25/2884). The assessment position is the ground floor lounge window on the East elevation of 48 Wickham Way RH161UQ and is 6m (actual 6.9m) from the proposed heat pump location.

Step	Instructions	MCS contractor results/ notes
1	**Vaillant Arotherm Plus** **Manufacturers data states the sound power level of the heat pump is 55dBA**	STEP 1 RESULT= 55dBA
2.	**The Heat Pump is to be installed on the ground and against a single wall. Directivity Q of the heat pump noise is Q4**	STEP 2 RESULT= Sound Pressure Level at 1m is 45dBA Q4
3.	**Distance between heat pump and assessment position is 6m.**	STEP 3 RESULT= 6M
4.	**dB reduction 6m@Q4 = -20dB**	STEP 4 RESULT= -20dBA

5	**There will be a 1.8m fence between the heat pump and the assessment position.** **The assessment position is NOT visible when moving less than 25cm = -10dB**	STEP 5 RESULT= -10dBA
6	**Sound Pressure Level** **(STEP 1) + (STEP 4) + (STEP 5)** **(55)+ (-20)+ (-10)= 55-20-10= 25dB**	STEP 6 RESULT= 25dBA
7.	**Background noise level. For the purposes of the MCS Planning Standard for air source heat pumps the background noise level is assumed to be 40 dB(A) Lp.**	STEP 7 RESULT= 40 dB(A)

8.	**The difference between background noise level and the heat pump noise is 40dB- 25dB= 15dB**	STEP 8 RESULT= 15dBA

9	**Decibel Correction** **40dB-25dB=15dB.** **Adjustment figure @15dB is 0.1dB** **Higher Figure is 40+ 0.1= 40.1** **Rounded up figure = 41dB** **Final result at this assessment position is 41dBA**	FINAL RESULT= 41dBA
10	**The FINAL RESULT is lower than the permitted development noise limit of 42.0dB at 41dBA**	Final result is equal to or lower than 42.0dBA YES