



Guidance on siting an Air Source Heat Pump Building Regulations – Permitted Development noise levels

An Air Source Heat Pump installation must either receive planning permission or be classified as a permitted development. Permitted development is achieved by compliance to the Town and Country Planning (General Permitted Development) Order. Separate acts apply to England, Wales and Scotland, these are available from www.legislation.gov.uk.



In order to achieve permitted development status in England and Wales the installation must comply with the MCS020 standard, which requires a noise limit below 42 dB(A). It is the responsibility of the MCS Approved installer to confirm compliance with MCS020. Where this is Nu-Heat you will be contacted by one of our design engineers for information that will enable us to carry out the calculation. This document explains the questions you will be asked.

A copy of the calculation will be inserted into the *Commissioning & Warranty Documents* section of Nu-Heat's *MCS Handover Pack* as proof of compliance.

Please note that compliance to MCS020 does not mean that a heat pump installation is classed as permitted development. Other requirements of the *Town and Country Planning Act* must also be followed.

Planning requirements of the *Town & Country Planning Act*

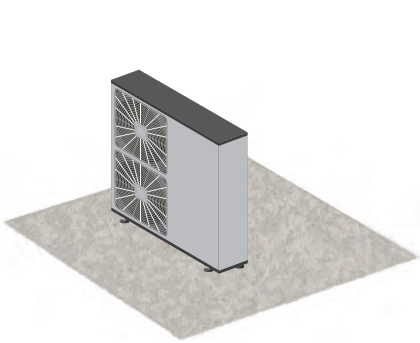
- ✓ Compliance with MCS020
- ✓ Only 1 ASHP is installed at the property
- ✓ A wind turbine is not installed at the property
- ✓ The ASHP is more than 1m from the edge of the householder's boundary (3m in Wales)
- ✓ The ASHP is not installed on a pitched roof or within 1m from the edge of a flat roof
- ✓ The ASHP is not installed at a listed building (other restrictions apply in a Conservation Area or World Heritage site)
- ✓ The ASHP is not installed on a wall or roof which fronts a highway
- ✓ The ASHP is not installed on any part of a wall that is above the level of the ground storey (not applicable to Wales)

Should the installation fail to achieve all of these requirements planning permission will be required. In Scotland compliance to the *Town and Country Planning Act* requires nearly all ASHP installations to obtain planning permission.

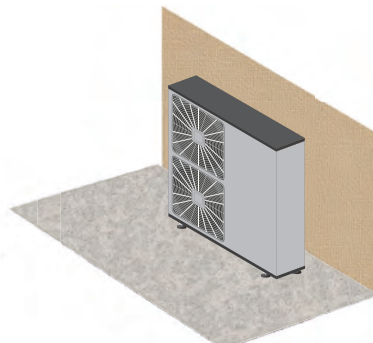
MCS020 looks at the impact your heat pump installation will have on adjacent properties. The aim is to ensure that the operation of your heat pump will not have a negative impact, the main consideration being noise levels experienced by your neighbours.

Air source heat pump location

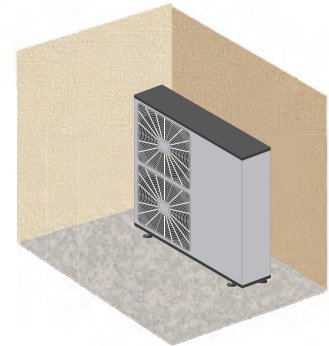
Solid surfaces situated within 1-metre of the heat pump will reflect the sound it generates, therefore they must be taken into account when assessing location.



The heat pump is NOT within 1 metre of any walls.



The heat pump is within 1 metre of ONE wall.



The heat pump is within 1 metre of TWO walls.

Assessment position

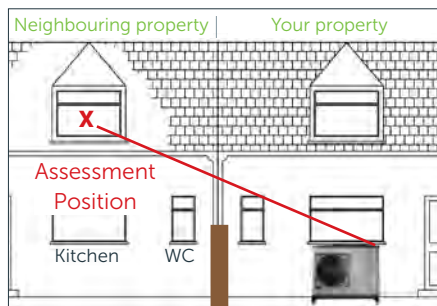
The *Assessment Position*, from where the heat pump's noise levels will be calculated, is located immediately outside a window or door of the neighbouring property (each adjacent property must be assessed separately). Only windows or doors leading to 'habitable' rooms need to be considered, therefore bathrooms, shower rooms, WCs and kitchen are excluded.

To comply with MCS020 the result must be lower than 42dB(A).

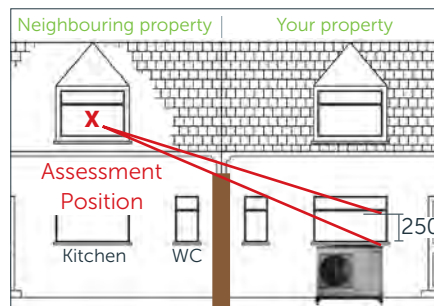
In order to complete the calculation on your behalf the Nu-Heat Design Engineer will need to know the distance between the *Assessment Position* and the proposed heat pump location.

Barriers

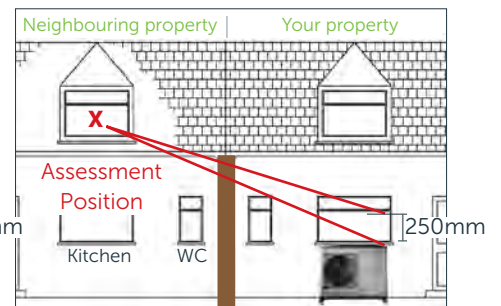
MCS020 allows a reduction in noise level to be applied if the heat pump is completely obscured from the *Assessment Position* by a solid barrier such as a fence or wall. A further reduction can be applied if an area of 250mm entirely surrounding the heat pump is also obscured from view.



No barrier between part of the heat pump and *Assessment Position* – No dB reduction.



Solid barrier between ALL of heat pump and *Assessment Position*. *Assessment Position* IS visible from 250mm away from ASHP – 5dB noise reduction applied.



Solid barrier between ALL of heat pump and *Assessment Position*. *Assessment Position* is NOT visible from 250mm away from ASHP – 10dB noise reduction applied.

Data taken from MCS020 and correct at date of publication. For more information visit: www.microgenerationcertification.org/mcs-standards/installer-standards