MCS 020: Planning Standard for Permitted Development Installations of Air Source Heat Pumps

Consultation

Closing date: 26 January 2024

The MCS Service Company Ltd
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About MCS

Giving you confidence in home-grown energy

With energy costs constantly rising and climate change affecting us all, low-carbon technology has an ever increasing role to play in the future of UK energy.

We're here to ensure it's a positive one.

Working with industry we define, maintain and improve quality – certifying products and installers so people can have confidence in the low-carbon technology they invest in. From solar and wind, to heat pumps, biomass and battery storage, we want to inspire a new generation of home-grown energy, fit for the needs of every UK home and community.

About

The Microgeneration Certification Scheme Service Company Ltd (MCSSCo Ltd) trades as MCS and is wholly owned by the non-profit The MCS Foundation. Since 2007, MCS has become the recognised standard for UK products and their installations in the small-scale renewables sector.

We create and maintain standards that allow for the certification of products, installers and their installations. Associated with these standards is the certification scheme, run on behalf of MCS by Certification Bodies who gold UKAS accreditation to ISO 17065.

MCS certifies low-carbon products and installations used to produce electricity and heat from renewable sources. It is a mark of quality. Membership of MCS demonstrates adherence to these recognised industry standards, highlighting quality competency and compliance.

Vision

To see MCS certified products and installations in every UK home and community.

Mission

To give people confidence in home-grown energy technology by defining, maintaining and improving quality.

General information

Why we are consulting

To capture feedback that can help inform standards to:

- ensure the process of having a heat pump installed is as easy as possible for both consumer and contractor;
- make the assessment methodology more robust;
- make heat pump installations available to as many consumers as possible;
- remove current perceived barriers in the process of installing heat pumps.

Consultation details

Issued: 30 November 2023

Respond by: 26 January 2024

How to respond

We encourage respondents to address the questions posed in this consultation by completing the associated consultation feedback form that can be found on the MCS website. Responses are welcome to all, or a selection of, the consultation questions included in this document.

General feedback on the proposals described in this document is also welcome.

Responses should be submitted by no later than the date shown above, by:

Email to: consultations@mcscertified.com

OR

Write to: The MCS Service Company Ltd, Violet 3, First Floor, Sci-Tech Daresbury, Keckwick Lane, Daresbury, Cheshire, WA4 4AB

A response form is available here: https://mcscertified.com/consultation-mcs-020-planning-standard-for-permitted-development-installations-of-air-source-heat-pumps

When responding, please state whether you are responding as an individual or representing the views of an organisation and if you want the information that you provide to be treated as confidential.

If you have any questions about this consultation, please contact MCS on 0333 103 8130 or email consultations@mcscertified.com

Introduction

MCS (the Microgeneration Certification Scheme) is the UK standards body for small-scale renewables. We ensure that enforceable, industry-wide standards are written and implemented for low-carbon energy and heat technologies, giving consumers confidence in home-grown energy.

Heat in buildings is one of the largest abatable sources of greenhouse gas emissions in the UK. The heat we generate to warm our homes and business spaces accounts for approximately 23% of all emissions nationwide.

Heat pumps have been shown to be a cost effective and energy efficient solution to heating and decarbonising UK homes, and the Government has announced an ambition to grow the market to 600,000 heat pump installations a year in UK homes by 2028.

To enable homeowners to install heat pump technology in their homes, Air Source Heat Pumps are deemed permitted development, subject to certain conditions. Permitted Development Rights allow development to be carried out without a planning application, subject to conditions. Planning is devolved so conditions differ across the four devolved administrations; however, all four include a requirement for any Air Source Heat Pump to be compliant with MCS 020: MCS Planning Standard for Permitted Development Installations of Wind Turbines and Air Source Heat Pumps on Domestic Premises.

MCS 020 is designed to allow certified contractors to establish clearly whether an installation will meet permitted development requirements, including a calculation procedure to determine noise limit. Since MCS 020 was first issued in August 2011 and last updated in June 2019, there have been significant improvements in heat pump technology and contractors and consumers have raised concerns that current Permitted Development Rights are a barrier to the installation of Air Source Heat Pumps.

For example, Permitted Development Rights within Wales currently require air source heat pumps to be installed on domestic premises at least three metres from the site boundary and in England the rule is one metre. These requirements are considered a potential barrier to the uptake of heat pumps, especially in a terraced housing context.

In response to these concerns, the UK Government Department for Energy Security and Net Zero (DESNZ) and the Welsh Government both commissioned independent reviews of Air Source Heat Pump noise emissions and planning regulations. The DESNZ review, published in November 2023, recommended changes to Permitted Development Rights in England and to MCS 020.

At the Chancellor's Autumn Statement on 23 November 2023, it was announced that the UK Government will consult on changing Permitted Development Rights that apply in England, including removing the one metre boundary rule. The Welsh Government anticipates a subsequent update to Permitted Development Rights for Air Source Heat Pumps in Wales.

MCS is now consulting on MCS 020 and exploring options to update associated standards including MIS 3005-I, the Heat Pump Standard (Installation). The proposed changes include improving the definition of a solid barrier, background noise level assumptions and updated guidance on location. Proposals are designed to make installing a heat pump easier and more accessible.

Questions on Proposed Changes

In response to findings from the independent review commissioned by DESNZ, we are consulting on proposed changes to MCS 020 and exploring options to update other standards to remove potential barriers to heat pump installation and make heat pump rollout easier. In addition, the proposed changes will make the assessment more robust.

Below, we are seeking opinions on three distinct categories of proposals. These proposals pertain to the noise assessment methodology current employed by heat pump installers, the definition of a solid barrier in our heat pump standards, and the installation of multiple heat pumps in a property. Please respond to any or all of these questions.

Current Clauses in MCS 020

Section 3 of MCS 020, MCS Planning Standard for Permitted Development Installations of Wind Turbines and Air Source Heat Pumps on Domestic Premises, defines a planning standard for Air Source Heat Pumps.

This includes a detailed methodology for assessing heat pump noise, which should be below the permitted development limit of 42.0dB(A). It is currently required for all heat pumps installed under Permitted Development Rights in England to a calculated noise level below this limit using the procedure detailed in MCS 020.

The four questions below relate to the methodology as laid out in **Table 2** of MCS 020.

Q1.1 Are there any circumstances (e.g. distance to nearest property) that could mean a noise assessment is not necessary to meet the conditions in Permitted Development Rights?

Q1.2 Contractors are required to obtain the A-weighted sound power level of the heat pump from manufacturer's data to calculate heat pump noise. To avoid confusion over which value for sound power level should be used, we propose having a single database to obtain the sound power level, for example the MCS Product Directory, instead of the manufacturer's data. Do you agree with this proposal, if so, where should the information be held?

Q1.3 The methodology requires contractors to establish whether there is a solid barrier between the heat pump and the assessment position. We intend to clarify what can and cannot be considered a solid barrier. In this respect, what types of barriers (e.g. different types of fence panels, walls, hedges) are likely to be encountered when installing heat pumps on domestic properties?

Q1.4 The current background noise assumption used in the methodology is 40dB. We are proposing to maintain this assumption for urban areas but decrease the background noise assumption to 35dB for rural areas. To determine whether an area is rural or urban, we propose using this postcode lookup tool. Do you agree with this method? Are there other considerations we should make in determining whether a domestic property is in an urban or rural area?

Q1.5 We want to ensure the assessment methodology is straightforward for installers on-site to accurately follow. Are there ways to make the assessment simpler and more streamlined?

Additional Noise Clauses in MIS 3005-I

MIS 3005-I, the Heat Pump Standard (Installation), describes the MCS requirements for the installation and commissioning of heat pump systems.

We intend to introduce requirements in MIS 3005-I to ensure contractors minimise the acoustic impact of heat pump installations. E.g., selecting installation positions that minimise the number of reflective surfaces adjacent to the heat pump.

Q2.1 What steps could be considered appropriate to strengthen the requirements in the Heat Pump Installation Standard to ensure the acoustic impact of heat pumps on domestic properties is minimised? For example, should we consider tonality, orientation, location, avoiding reflective surfaces, the use of anti-vibration mats or other steps, and how?

Multiple Heat Pumps in the Curtilage of a Property

In order to facilitate the deployment of heat pumps we are intending to develop a methodology to accurately assess the impact on neighbouring properties of the noise from multiple cascaded heat pumps installed on a domestic property.

The below questions relate to an MCS methodology that could be developed if the Department of Levelling Up, Housing and Communities (DLUHC) or the devolved administrations remove the restriction on multiple heat pumps in a single domestic property.

Q3.1 Are there any circumstances where it would not be appropriate to install multiple cascaded heat pumps on the same property? For example, due to the heat load or system design to the property, or the location of the property?

Q3.2 The proposed methodology would likely be based on a spreadsheet in order to make calculations simpler for installers on-site, but is there additional benefits to making a paper-based methodology available too?

Multiple Heat Pumps in Areas of High Population Density

The independent review commissioned by DESNZ highlighted that there is concern from some stakeholders over the potential for cumulative noise from multiple installations in areas of high population density, like block of flats. Furthermore, in summer 2023 Scottish Government consulted on potential changes to Permitted Development Rights in Scotland, including removing the current condition which allows one Air Source Heat Pump per building under Permitted Development Rights.

The below questions relate to circumstances where multiple heat pumps are installed in a neighbourhood, whether this is at multiple properties, or a single property.

Q4.1 What methods could be used to determine the appropriate maximum number of heat pumps which should be installed in areas of high population density and their relative positioning (both distance and angles)?

Q4.2 What precautions should be taken to avoid raising background noise above agreed levels when multiple heat pumps are being installed in a given area?

Next steps

This consultation will close on the 26 January 2024, after which responses will be analysed and a summary of all of the feedback received will be published. We will consider all of the feedback we receive and provide a summary of responses.

It is our intention to update MCS 020 in response to feedback received on this consultation in 2024. The date we will be able to do so will be dependent upon the nature and volume of feedback we receive, but we will publish an update on the outcome when we publish the summary of responses.

This feedback and outcome of this consultation will also be shared with DESNZ, DLUHC and the devolved administrations to consider alongside feedback on their upcoming consultation on Permitted Development Rights.

We would like to thank you in advance for your consideration and response to this consultation. If you have any questions in relation to this consultation, please contact our Secretariat at consultations@mcscertified.com.