

PAS 2030:2023

Installation of energy efficiency measures in existing dwellings – Specification



Department for
Energy Security
& Net Zero

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Foreword

Publishing information

This PAS was sponsored by The Department for Energy Security and Net Zero (DESNZ). Its development was facilitated by BSI Standards Limited and it was published under licence from The British Standards Institution. It will come into effect on 30 March 2025.

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Supersession

PAS 2030:2023 supersedes PAS 2030:2019+A1:2022 which remains current and will be withdrawn on 30 March 2025.

Information about this document

This is a full revision of the document and introduces the following principal changes.

- PAS 2035 guidance clauses have been updated to:
 - a) reflect national policy; and
 - b) emphasise the role of PAS 2035 in protecting the consumer.
- Clauses have been included to facilitate scale retrofit by allowing retrofit design to commence based on assessments of archetypes.
- The BEIS retrofit technical guides have been included as references.
- The risk assessment process has been simplified to avoid unintended complexities.
- Reflecting the change of emphasis from measures-based retrofit to whole dwelling retrofit by including more reference to a Main Contractor.
- Clarification of the role of the Retrofit Coordinator, including site visits and recording of non-compliance.
- Contents of a Medium Term Improvement Plan is now a requirement rather than guidance.
- Requirements to produce an airtightness strategy for projects, which may include setting of an airtightness target and air leakage testing.
- Clarification of what happens in the PAS 2035 process if historic significance is identified. A new Annex E is included.

- Annex C has been simplified where possible and brought in line with the new Approved Document F.
- Further monitoring and evaluation references the new BS 40101 standard for Building Performance Evaluation, and Monitoring and Evaluation is now considered from inception through to completion.
- A process has been included whereby distressed replacement of heating appliances can retrospectively comply with PAS 2035.
- The guidance and requirements for climate resilience and adaptation in retrofit has been strengthened.
- The requirements and qualifications for independent inspection of the pre-installation building inspection (PIBI) some PAS 2030 Annexes has been strengthened.
- Requirements and guidance around moisture in buildings has been brought in line with language in BS 5250.

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

PAS 2030:2023 is published with the expectation that installers intending to claim compliance with it, will commence adoption of its provisions immediately following publication with a view to fully meeting its requirements and claiming compliance with PAS 2030:2023 and therefore also PAS 2035:2023, by 30 March 2025. During this period, PAS 2030:2019+A1:2022 will remain available for use where required but will be withdrawn on 30 March 2025.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Relationship with other publications

PAS 2035:2023 is intended to be read and used in conjunction with PAS 2030:2023.

Presentational conventions

The provisions of this document are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the *Shorter Oxford English Dictionary* is used (e.g. "organization" rather than "organisational").

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Introduction

PAS 2030 continues to provide a specification for the installation of energy efficiency measures (EEM) in existing dwellings. This is in response to market changes that have altered the context in which it is applied and to align with the parallel introduction of PAS 2035, which is applicable only to dwellings. As a result, this PAS is no longer applicable to buildings used for purposes other than dwellings.

Although this PAS was originally developed with support for the United Kingdom Green Deal Financing Mechanism as a primary objective, it has always been appropriate for application in respect of any EEM installation, irrespective of how that installation is to be funded.

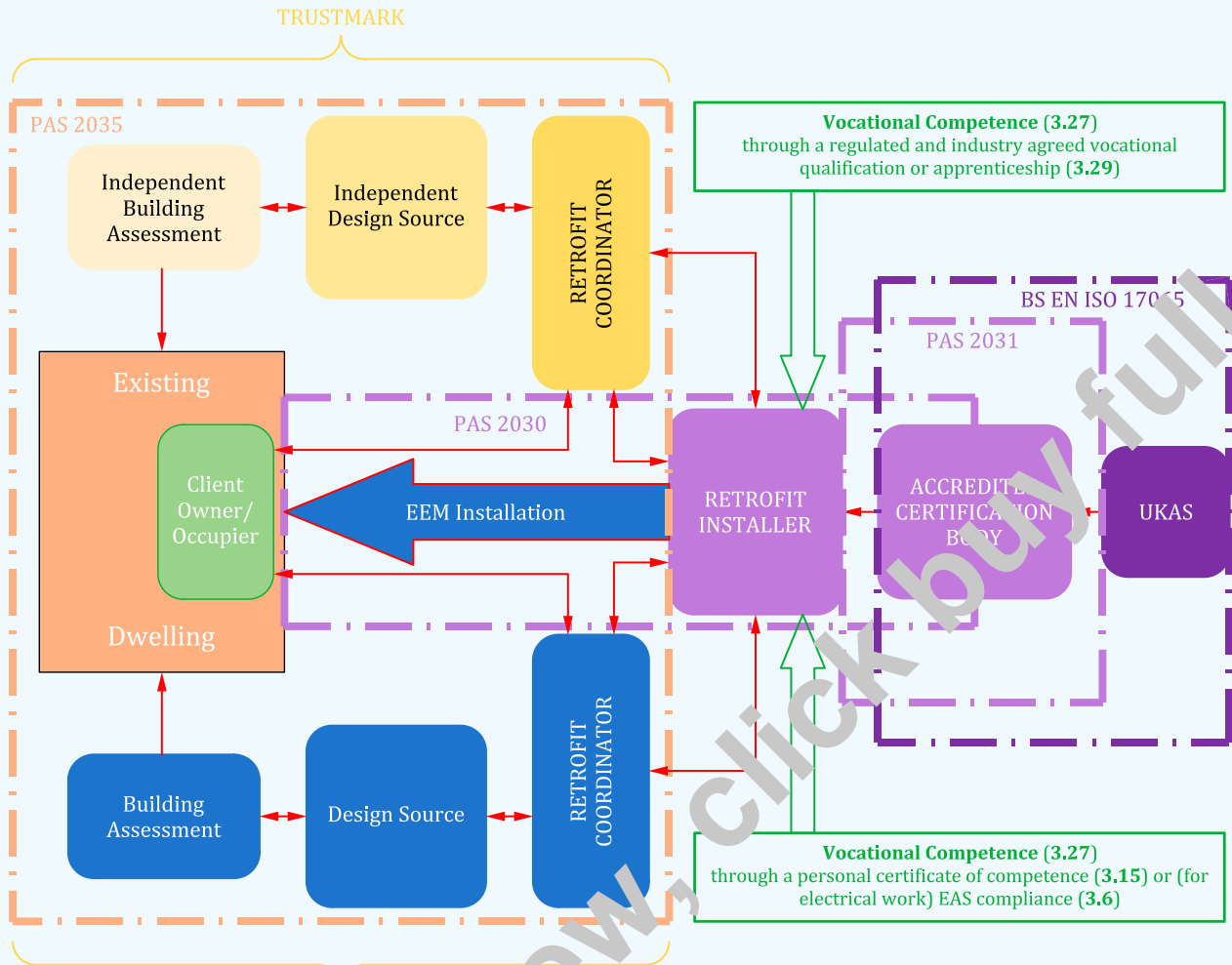
Attention is drawn to the fact that this PAS does not set out a specification for the design of EEM or for the assessment of dwellings undertaken to inform such designs – those topics are covered by PAS 2035. It does, however, set out critical aspects of retrofit design that Retrofit Installers expect to find addressed in the designs they work to and without which they should not commence installation.

The primary objective for the PAS remains the provision of a robust, uniformly applicable EEM installation process that can assist Retrofit Installers to comply with its requirements in full to demonstrate that their installation processes are capable of providing installation to specification and in accordance with the Client's expectations. Figure 1 shows how this PAS interacts with PAS 2035 and other standards for the installation and validation of EEMs.

Each of the energy efficiency measures covered by this PAS is provided for in a measure-specific annex. Compliance with this PAS requires that for each installation, the Retrofit Installer has to meet all the normative requirements of Clause 4 to Clause 9 of PAS 2030 together with those set out in the annex relevant to each measure to be installed.

This PAS specifies claims of compliance to be in respect of the core requirements and all annexes relevant to the installation undertaken by the claiming entity. The entity also identifies whether the claim is on the basis of self-assessment, other party assessment or independent third-party validation and to differentiate between installation undertaken on the basis of a Retrofit Installer provided retrofit design and that undertaken in accordance with a retrofit design provided by an independent third party.

Figure 1 – EEM installation and validation system – Overview, indicating the relevant specifications and their areas of application



1 Scope

This PAS specifies requirements for the installation of energy efficiency measures (EEM) in existing dwellings (not new build). It no longer covers buildings used for non-dwelling purposes. It is intended for use by any entity undertaking the installation of any products and/or systems designed to improve the energy efficiency of such dwellings in accordance with PAS 2035:2023.

As with previous editions, this PAS includes requirements in respect of installation processes, process management and service provision and includes criteria relating to installation methods, equipment, tools, product or system and material suitability, the commissioning of installed measures and the training, skills and vocational qualification of the people undertaking such installation. The PAS includes information provided to assist Retrofit Installers to fulfil their responsibility to ensure the effective co-functioning of EEM installed in the same dwelling.

This PAS consists of core requirements to be met by any entity claiming compliance with it, and normative measure-specific annexes setting out supplementary requirements for each included measure type.

Claims of compliance with this PAS will be in respect of the processes and procedures employed and their application in the installation of EEM in a given dwelling. Such claims do not reflect the quality or performance of the retrofit design which will be the subject of claims of compliance with PAS 2035:2023.

Annex A provides detail of the PAS 2030 measure-specific annex structure and its relationship to the list of specified measures and includes information to assist Retrofit Installers to fulfil their responsibility for verifying the correct functional relationship between EEM installed in the same dwelling.

Annex B, Annex C and Annex D provide specific requirements relating to particular energy efficiency measures, or groups of measures, for application by Retrofit Installers undertaking installation of those measures. These annexes also include additional requirements in respect of the provision of information to clients.

Annex E identifies the points of substantive change between PAS 2030:2017 and PAS 2030:2019.

Annex F sets out guidance on the use and application of PAS 2030.

Annex G provides an example installation project information collation form that can be copied and used by Retrofit Installers to assist demonstration of their compliance with this PAS.

This PAS does not include requirements relating to the certification of PAS 2030 compliance by independent third parties, which is covered by PAS 2031.

***NOTE** Those undertaking the roles within this PAS might also have duties to comply with under the requirements of health and safety legislation. The installation of energy efficiency measures (EEM) in existing dwellings is construction work as defined in the Construction (Design and Management) Regulations 2015 [1]. Attention is also drawn to the Health and Safety at Work etc. Act 1974 [2] and other health and safety regulations. See <https://www.hse.gov.uk/construction/> for more information.*