



RISE

Retrofit information,
support & expertise

PAS 2035

Quick guide

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What is PAS 2035?

PAS 2035 is a British Standard that provides a comprehensive framework for retrofitting existing homes to improve their energy efficiency and reduce carbon emissions. It was first published in 2019 following the Each Home Counts Review, which identified significant issues in retrofit delivery, such as poor installation standards. This led to unintended consequences and caused problems like dampness and mould.

The standard outlines the entire retrofit process, including assessment, design, installation, testing, commissioning, handover, advice, and monitoring. It introduces several specialist roles, such as retrofit coordinators, designers, assessors, and advisors, specifying the qualifications and experience required for each. Compliance with PAS 2035 is mandatory for government-funded domestic retrofit projects.

PAS 2035 emphasises a whole-house approach to retrofit, ensuring that all measures are appropriate for the building and its occupants.

How do you comply with PAS 2035?

Working in line with PAS 2035 involves several key steps to ensure compliance with the standard. Here's a brief overview of the process:

- **Preliminaries:** Establishing your objectives and the overarching brief for the retrofit project
- **Risk assessment:** Conduct a thorough risk assessment to determine the level of risk associated with the retrofit project
- **Whole dwelling assessment:** Perform a comprehensive assessment of the entire dwelling to gather detailed information about its current condition
- **Retrofit design:** Develop a retrofit design based on the assessment, ensuring it meets the required standards and addresses the identified risks
- **Installation:** Implement the retrofit measures exactly as per the design specifications
- **Testing and commissioning:** Test and commission the installed measures to ensure they are functioning correctly and efficiently
- **Handover:** Provide a detailed handover to the client, including all necessary documentation and guidance on maintaining the retrofit measures
- **Retrofit advice:** Offer ongoing advice and support to the client to ensure the long-term success of the retrofit project

Following these steps helps ensure that retrofit projects are carried out effectively, improving energy efficiency, reducing the risk of unintended consequences, and offering protection to the tenants and landlord.

Further more information, see the following resource:

- [The PAS 2035 compliance process map, The Retrofit Academy](#)

What are the roles and responsibilities defined by PAS 2035?

PAS 2035 defines several key roles to ensure that each of the above stages is managed and executed effectively in retrofit projects. Here are the main roles:

| | |
|---|---|
| Retrofit coordinator | Manages the entire retrofit project, ensuring all activities are coordinated and comply with PAS 2035 standards. This role is crucial for overseeing the project from start to finish |
| Retrofit assessor | Conducts a detailed assessment of the dwelling to understand its current condition and identify suitable retrofit measures |
| Retrofit designer | Develops the retrofit design based on the assessment, ensuring it meets the required standards and addresses identified risks |
| Retrofit installer/main contractor | Carries out the installation of the retrofit measures as per the design specifications |
| Retrofit evaluator | Monitors and evaluates the performance of the retrofit measures post-installation to ensure they meet the desired outcomes |

Each role requires specific qualifications and competencies to ensure the retrofit project is carried out effectively and to a high standard. For more information, see the following resource:

- [PAS 2035 retrofit roles, Value Optimised Resource](#)

What are the benefits to aligning with PAS 2035?

Aligning social housing retrofit projects with PAS 2035 offers several significant benefits:

- **Cost savings:** The standard promotes a 'whole dwelling' approach and a 'fabric first' strategy, focusing on improving the home's energy efficiency and adequate ventilation, which can present savings on energy bills for residents. This approach can also lead to long-term cost savings for landlords, by reducing the need for future repairs related to cold, damp homes
- **Reduced carbon footprint:** By improving the energy efficiency of social housing, PAS 2035 helps reduce the carbon footprint of housing stock, contributing to organisation's broader environmental and sustainability targets

- **Risk mitigation:** PAS 2035 includes thorough risk assessments and quality assurance processes, reducing the likelihood of defects and unintended consequences such as damp and mould
- **Professional management:** The standard mandates the involvement of qualified professionals in key roles, ensuring that projects are managed effectively and to a high standard
- **Compliance and funding:** Aligning with this standard ensures eligibility for government funding, which can be crucial for financing retrofit projects
- **Enhanced comfort and health:** By addressing issues such as damp, mould, and poor ventilation, PAS 2035 helps create healthier living environments, improving the overall comfort and well-being of residents

What are the challenges of PAS 2035 and how can they be overcome?

Implementing PAS 2035 can present challenges, despite its many benefits. Here are some of the key difficulties and how to overcome them:

| Challenge | Detail | Ways to overcome it |
|---|---|--|
| Increased costs | The comprehensive assessments and coordination can make simple measures, like upgrading loft insulation, more expensive due to the need for additional surveys and ventilation upgrades | Implementing retrofit measures in phases to spread out costs over time can make the financial burden more manageable |
| Managing complex processes between different stakeholders | The detailed processes and documentation required can add layers of complexity, potentially slowing down project timelines | Streamlined documentation through standardised templates and wording can reduce administrative burdens. Utilising digital tools and software for project management can help track progress, manage and improve communication |
| Skills and training | Some professional roles involved in the retrofit process require specific qualifications and competencies, which may require additional training and certification | Investing in training programs for all roles defined in PAS 2035 ensures that all professionals involved are adequately qualified and competent. This may include encouraging ongoing professional development to keep up with |

| | | |
|--------------------------------|--|---|
| | | the latest standards and best practice |
| Coordination and communication | Effective coordination among various stakeholders (e.g., retrofit coordinators, designers, installers) is crucial but can be difficult to achieve. Miscommunication or lack of coordination can lead to project delays and increased costs | Clear communication channels should be established among all stakeholders. This may include regular meetings to discuss progress, address issues, and ensure coordination among different teams |
| Risk management | Thorough risk assessments are essential to avoid unintended consequences, such as damp and mould. However, managing these risks effectively requires careful planning and expertise | Conducting thorough risk assessments at the beginning of the project will identify potential issues and plan mitigation strategies. Coupled with quality assurance processes, this will help monitor the project and ensure compliance with standards |
| Compliance and monitoring | Ensuring ongoing compliance with PAS 2035 standards and monitoring the performance of retrofit measures post-installation can be resource-intensive | Conducting regular audits will ensure ongoing compliance with PAS 2035 standards. Post-installation monitoring of the performance of retrofit measures will help measure benefits |
| Stakeholder engagement | Engaging and educating all stakeholders about the benefits and requirements of PAS 2035 can be challenging, especially if they are unfamiliar with the standards or the retrofit process | Educating stakeholders about the benefits of PAS 2035 and the retrofit process will help gain their support and cooperation. Methods to address stakeholder concerns and feedback will help improve the retrofit process |