

Navigating PAS 2035 for healthier homes

Wates 

Expert guidance on the challenges and opportunities
in ensuring Wave 3 is delivered to quality



Reimagining places
for people to thrive

The role of PAS 2035 in driving retrofit quality

PAS 2035 has become established as the UK's leading standard for improving energy efficiency in buildings while safeguarding residents' health and wellbeing. A critical part of this framework is ensuring that retrofit projects do not inadvertently introduce or exacerbate damp and mould issues.

However, compliance with PAS 2035 alone does not guarantee success—high-quality outcomes require a collaborative approach involving contractors, housing providers, residents, and regulators.



How PAS 2035 supports retrofit quality

PAS 2035 provides a structured foundation to mitigate these challenges through the following mechanisms:



Whole-house approach

Ensures that insulation, ventilation, and heating are considered holistically, avoiding unintended consequences, such as moisture build-up.



Comprehensive pre-retrofit assessments

Mandates thorough surveys to assess existing damp, ventilation inadequacies, and insulation gaps before work begins.



Ventilation and moisture management requirements

Enforces integration of ventilation upgrades alongside insulation to prevent condensation and damp.



Mandatory oversight by a retrofit coordinator and Main Contractors

Ensures independent supervision of installations to verify compliance and quality of the supply chain installers.



Post-retrofit monitoring and quality assurance

Includes performance validation to confirm that the expected energy and moisture control benefits are realised.



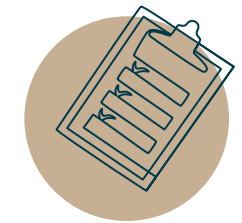
Main Contractor best practice to ensure quality

While PAS 2035 provides a robust framework, Main contractors play a critical role in ensuring quality, which should provide DESNZ and the industry confidence of quality delivery. Beyond compliance, some of the best practices implemented by Wates include:



Rigorous pre-retrofit inspections

- Conduct building condition surveys to ensure structural integrity and ventilation adequacy.
- Use moisture mapping and thermal imaging to detect hidden damp problems before beginning work.



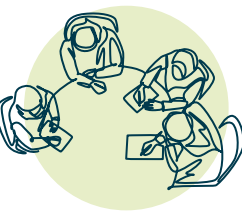
Address pre-existing damp issues

- Treat any identified damp or mould problems before installing insulation.
- Implement damp-proofing measures where necessary, such as vapour barriers or improved drainage.



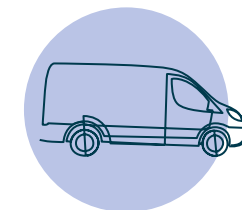
Prioritise ventilation at every stage

- Ensure passive and active ventilation upgrades are integrated into the retrofit design.
- Use advanced systems such as Mechanical Ventilation with Heat Recovery (MVHR) where possible.



Supply chain management

- Rigorous supply chain onboarding to ensure compliance – for example, adoption of Construction Line Gold.
- Quality handover review of each measure installed.
- Insurance backed guarantees with every install.



Select the right materials

- Use moisture-resistant insulation and breathable materials to allow controlled moisture escape.
- Avoid materials that could trap condensation, leading to mould growth.



Embed quality assurance throughout the process

- Conduct mid-project inspections to identify and correct issues early.
- Audits by Wates Retrofit Compliance Teams.
- Use air tightness tests and thermal imaging to confirm performance post-installation.



Collaborate with Retrofit Designers and Retrofit Coordinators

- Work closely with Retrofit Designers to ensure that insulation, ventilation, and moisture control are properly planned.
- Maintain open communication with Retrofit Coordinators to ensure quality control and compliance throughout the project.



Training and skills

- Every member of the Wates delivery team undertakes a mandatory PAS 2035 training course.
- Training is also offered to housing providers on existing projects.



Educate residents for long-term success

- Provide handover guidance on how to operate ventilation and new heating systems effectively.
- Deploy smart monitoring tools to detect emerging issues.



Holistic approach asset management

- Integrate energy efficiency improvements with broader asset management strategies to ensure a more holistic approach.
- Align retrofit projects with ongoing maintenance schedules, lifecycle planning, and resident engagement efforts.

Following these additional steps can help reduce the likelihood of damp and mould and ensure a high standard retrofit that delivers energy efficiency while supporting occupant health and long-term sustainability. This proactive approach contributes to the overall success of the retrofit project while fully complying with PAS 2035's requirements.

Challenges in achieving high quality retrofits

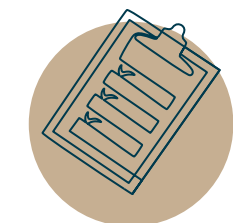
- what to watch out for

Despite PAS 2035's structured approach, challenges to ensure retrofit projects deliver the intended outcomes for both the home and resident remain. These include:



Failure to fully implement PAS 2035 standards

Under ECO, the recent audits have shown some installers cut corners to save costs, leading to poor-quality work and may not follow the retrofit designs.



Lack of resident awareness and training

Residents are often not given the guidance on how to operate new energy-efficient homes and low carbon heating systems, and a poor understanding of ventilation can lead to unintended damp and mould issues.



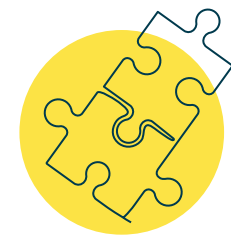
Conflicts of interest and oversight gaps

In cases where the same company acts as both retrofit coordinator and installer, self-certification risks could arise. Quality assurance remains inconsistent due to fragmented accountability.



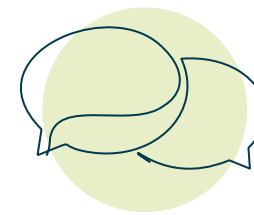
Technical challenges

Older buildings often have unique structural issues that complicate insulation and ventilation upgrades. These require experts familiar with these archetypes to design and install the right solutions.



Regulatory overlap

Different compliance frameworks, such as building regulations and PAS 2035, sometimes create conflicting requirements, leading to confusion.



Complex interactions

The interactions between heating, ventilation and how residents behave in their homes are often complex, and need to be fully addressed.



Long-term accountability

Ensuring sustained performance requires ongoing monitoring and engagement, but responsibility often becomes unclear after installation is complete.

Conclusion

Beyond compliance to quality-first retrofits

PAS 2035 sets the foundation for high-quality, sustainable retrofits—but compliance alone isn't enough. Main Contractors must embrace best practices like those set out above, housing providers must enforce rigorous quality control, and residents must be empowered to maintain their homes effectively, with more use of sensors to understand live building performance.

By fostering collaboration and prioritising long-term performance over short-term gains, we can ensure that retrofits not only reduce energy consumption but also create healthier, more resilient homes for the future.



Get in touch

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