

IHBC comments on PAS2035

No	Section	Reason	Change
1.	1. Scope	We are concerned that this document assumes that retrofit is inevitable and that it fails to comprehend that buildings in good repair are more energy efficient than those which are not	Ensure that the existing building fabric is made as energy efficient as possible by ensuring that it is in good repair, in an appropriate way, before considering retrofit.
2	1. Scope Bullet 3	Moisture barriers are normally not suitable for traditional vapour permeable buildings. Repair needs to be given greater prominence. Dry fabric is more efficient (BS 7913:2013).	Improve the capability of the building envelope to manage moisture in a manner suited to its structure type. Ensure that the building is in a good state of repair prior to retrofit in order to prevent moisture penetration and improve resilience to flooding. Cross reference to BS 7913:2013.
3	2. Normative references	To minimise the risk of wasting carbon through inappropriate measures.	BS 7913 needs to be referenced within the document wherever applicable
4	3.2	More than technical knowledge which is required where older buildings are concerned. Here some knowledge of heritage issues is essential.	After the word 'technical' add ' and other '
5	3.4.1	None of these methods can be described as good as they are too general	Take out the word 'good' in the first section.
6	3.9	This applies not just to buildings with special protection, but to at least 25% of the building stock. <i>Solid Wall heat losses and the potential for energy saving: literature review</i> (BRE for Government) suggests traditional buildings form up to 35% of the stock. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/396363/solid_wall_insulation_literature_review.pdf	Change the definition to the following: Any building built before 1919 and /or as defined as a historic building in BS 7913
7	4.1.1	Sentence omits reference to type of building	Add the text in bold: "... appropriate to the building and to the nature ..."
8	4.2.4	Examples not quite complete	Add the text in bold: "... and appliances, set heating controls, operate ventilation, give off heat ..."

9	5.4.1	It is essential that the first action is to make the existing building fabric as efficient as possible without adding things on to a structure. Only after this should 'retrofit' should be considered.	Change this sentence 'This approach prioritises improvements in three stages:' to 'This approach prioritises improvements in four stages : Add into an additional sub paragraph as number 1 as follows: 'Put existing building fabric into good repair with materials and techniques that are suitable for the building in question'
10	5.4.2	To avoid wastage of carbon and money on inappropriate works	Add at the beginning of the sentence the following: It makes sense to make existing building fabric as energy efficient as possible before spending resources on other work that may not be necessary or sensible. Then change the current first sentence so that it reads as follows: Subsequently because insulation measures are generally amongst the most cost effective and long-lasting, and thus the best investment, insulation maybe the next best action or measure.
11	5.4.4		In the last sentence take out the word 'usually'
12	6.1.3 bullet point 2	The way it was originally written it assumes that there will never be a situation where there is a separate coordinator, so we have added that in.	Change to the following: 'coordinating and overseeing the activities of the Retrofit Advisor, Retrofit Assessor, Retrofit Designer, Retrofit Coordinator and Retrofit Evaluator, and overseeing the work of the Retrofit Installer'
13	8.3 before bullet 1	Although the risk matrix in Annex B indicates that a pre-1919 building is at high risk; the determination of the age has to be made. Condition needs to be understood at the outset	Add in two new bullet points at the beginning • 'Identify the age of the building and its construction type and whether it is a traditional (pre-1919) vapour

			<p>permeable building’.</p> <ul style="list-style-type: none"> • ‘Assess the building’s condition to determine whether the undertaking of repair work will result in increased energy efficiency and to also ensure that the building is in a sufficiently good state of repair to be retrofitted’
14	8.3 Bullet 1	Omits permeability	Add the words in bold: “. . construction, vapour permeability and condition . . .”
15	8.3 Bullet 3	<p>Omits special consideration under Building Regulations Part L1B 3.8 and 3.9 for buildings of traditional and breathable construction:</p> <p>“3.8 buildings where special considerations in making reasonable provision for the conservation of fuel or power may apply: c. buildings of traditional construction with permeable fabric that both absorbs and readily allows the evaporation of moisture.</p> <p>3.9 When undertaking work on or in connection with a building that falls within one of the classes listed above, the aim should be to improve energy efficiency as far as is reasonably practical. The work should not prejudice the character of the host building or increase the risk of long-term deterioration of the building fabric or fittings”</p>	Add additional bullet: identification and application of special consideration under Building Regulations Part L (buildings of traditional and breathable construction)
16	8.5.3	We are pleased to see this included – it is essential	
17	9.3.2	<p>Leaving this as it is provided inconsistency in the way this is described in section 8.5.3 and it is important to make it very clear that it does mean all traditional buildings. By just using the word ‘historic’ may lead to a misunderstanding by some. This section must refer specifically to ordinary buildings of traditional construction.</p> <p>See comments to 3.9.</p>	Change the part of the sentence in bold as follows: ‘If the dwelling to be improved is a traditional or historic building, or forms part of a traditional historic building, as defined in BS 7913’.
18	13.4.1 before Bullet 1	<p>Informed advice on repair and maintenance is a vital starting point. Absence of such advice risks wastage of money and carbon on inappropriate and</p>	<p>Add in a further bullet point at the beginning</p> <ul style="list-style-type: none"> • Advice on repair and maintenance and how this can

		damaging works.	help sustain the building and contribute towards its energy efficiency
19	13.4.1 Bullet 2	This interrupts behaviour change and retrofit “technologies” Should come later	Move to last but two
20	13.4.1 Bullet 3	Fabric is often not “technologies”	Replace “technologies” with “ measures ”.
21	Section A1.2	Retrofit advisors must initially have proven competence in examining a building and determining its age and construction type. Therefore, in order to reduce the risk, we suggest amending this section	Change the opening paragraph to the following: If there is any possibility that a Retrofit Advisor shall deal with an older, traditionally constructed or vulnerable building constructed prior to 1919, or a historic building as defined in BS 7913, or any project has been assessed as HIGH risk so the requirements of Path 3 of this PAS apply the Retrofit Advisor shall also hold one of the following qualifications:
22	Section A.2.3	Retrofit assessors must initially have proven competence in examining a building and determining its age and construction type. Therefore, in order to reduce the risk, we suggest amending this section	Change the opening paragraph to the following: If there is any possibility that a Retrofit Assessor shall deal with an older, traditionally constructed or vulnerable building constructed prior to 1919, or a historic building as defined in BS 7913, or any project has been assessed as HIGH risk so the requirements of Path 3 of this PAS apply the Retrofit Assessor shall also hold one of the following qualifications: Add Full membership of
23	Section A.4.2	This is an unwarranted restrictive practice and others who have a professional qualification of at least the same standing should be allowed.	Add the following to the end: or other Chartered professionals with the necessary expertise, or full members of the Institute of Historic Building Conservation (IHBC) who hold one of the SQA,

			<p>SCQF, or Agored Cymru Awards in <i>Energy Efficiency Measures for Older and traditional Buildings</i></p>
24	Section A.4.4	<p>The reason for the changes in A.4.4 is that there maybe insufficient accredited/ certified individuals at the highest level to meet the demand and therefore we suggest that for buildings which are not protected membership below the highest would be sufficient. Note the CIOB and RICS call their schemes certification and not accreditation. We have put in the list as the current list excludes most of the schemes, includes one that doesn't exist, and others have the wrong title.</p>	<p>Where any dwelling for which a retrofit design is to be prepared is an older, traditionally constructed or vulnerable building constructed prior to 1919, or a historic building as defined in BS 7913 and is protected as a Listed Building or a building in a Conservation Area, and the retrofit risk is assessed as HIGH and the requirements of Path 3 through this PAS apply, the Retrofit Designer shall also be accredited/certified in building conservation within one of the schemes listed below. This shall be at the highest level in schemes where there is more than one level for buildings which are Listed or in Conservation areas:</p> <ul style="list-style-type: none"> • Chartered Institute of Building (CIOB). • Chartered Institute of Architectural Technologists (CIAT). • Conservation Accreditation Register for Engineers (CARE). • The Royal Institute of the Architects of Ireland (RIAI). • Register of Architects Accredited in Building Conservation (AABC). • Royal Institute of British Architects, which incorporates the Royal Society of Architects in Wales and the Royal Society of Ulster Architects (RIBA, RSAW, RSUA). • Royal Institution of Chartered Surveyors (RICS).

			<ul style="list-style-type: none">• Royal Incorporation of Architects in Scotland (RIAS).
--	--	--	--