

---

## **PEPA Retrofit Assessor Scheme Requirements**

**2022 Edition**

---

## Document Control

### Change History

Version Number	Author	Description of Change	Date
1.0	A. Parkin	First Publication	10.09.19
1.01	A. Parkin	Addition of Preamble and clarifications	10.10.19
1.02 Draft	A. Parkin	Addition of Traditional Constructed Buildings Assessment and Provision of Advice Audit of Retrofit Assessment Report	13.08.20
1.021	A. Parkin	Addition of Disciplinary Action Section Further additions to same section	09.02.21 27.05.21 06.09.21
1.03	A. Parkin	Alignment of Audit Process with Retrofit Coordination Scheme Document	04.08.22

### Approval History

Name	Role	Organisations	Date	Version
A. Parkin	Working Group	PEPA	10.09.19	1.00
A. Parkin	Working Group	PEPA	04.01.20	1.01
A. Parkin	Working Group	PEPA	18.10.21	1.021
A. Parkin	Working Group	PEPA	04.08.22	1.03

### Distribution List

Name	Organisation	Version	Date	Reason for issue
Accreditation Schemes	Elmhurst Energy, STROMA, ecmk, Sterling, Qidos	1.00	10.09.19	A
Accreditation Schemes	Elmhurst Energy, STROMA, ecmk, Sterling, Qidos	1.01	17.02.20	A
Accreditation Schemes	Elmhurst Energy, STROMA, ecmk, Sterling, Qidos	1.021	18.10.21	A
Accreditation Schemes	Elmhurst Energy, STROMA, ecmk, Sterling, Qidos	1.03	04.08.22	A

Code	Reason For Issue:
-	Not issued.
I	For information only – no action required.
R	For review – comments to be directed to the Project Manager.
S	For sign-off approval.
A	Approved for issue (electronic approval via e-mail or meeting minutes)

## Property Energy Professional Association Retrofit Assessor Scheme Requirements

This document outlines the Scheme Requirements for EPBR Accreditation Schemes to extend their services to approve Retrofit Assessors to meet the requirements of PAS 2035.

This document has been written by the management of PEPA (the Scheme Owner) for the use of all EPBR Accreditation Bodies (The Scheme Operators) whether or not that EPBR Accreditation Body is a member of PEPA.

### Ownership

This document is managed on behalf of approved Certification Schemes by the PAS 2035 Retrofit Assessor Working Group.

The working group (WG) will:

- review the Scheme Requirements document and consider any updates that may be required, and
- be made up of all Certification Schemes and TrustMark representatives and will have a rotating nominated chair.

### Oversight

The working group will provide management oversight for the Scheme Requirements document. Trustmark will be stakeholders in the overseeing of the document.

Trustmark is the 'key' stakeholder for the Scheme Requirements document and have the 'Golden Vote'. This means that Trustmark can stop any proposed amendment they deem inappropriate or unacceptable.

As key stakeholders Trustmark are invited to all working group meetings and will be party to all correspondence. All proposed changes to the Scheme Requirements will be clearly flagged and highlighted to TrustMark. The working group will apply version control and effective go live dates to the document; this is to ensure that all stakeholders are always aware of the latest version

### Definitions

A **Retrofit Assessment** is the consideration of all evidence based upon a non-intrusive on-site assessment that will allow a Retrofit Coordinators to create a Medium-term Improvement Plan compliant with the requirements of PAS 2035.

A **Retrofit Assessor** is a person qualified to carry out a retrofit assessment,

A **Retrofit Assessment Report** is the written report that communicates the evidence of the *Retrofit Assessor* to the *Retrofit Coordinator*

All other definitions from the EPBR Scheme Operating Rules and PAS 2035 apply.

### **Authority to operate a Retrofit Assessor Scheme**

All Scheme Operators will be Accreditation Bodies approved by MHCLG for the accreditation of domestic energy assessors. The audit shall be called at least annually, and a copy of the report will be sent to the management team at PEPA.

As Scheme Operators are required to comply with MHCLG Scheme Operating Rules and are independently audited it is considered that there are adequate safeguards already in place to be assured that Scheme Operators have sufficient controls for Financial and Operational stability. Other aspects of the scheme management system will need to be extended;

### **Management systems**

To be extended to include the requirements of this Scheme Document

### **Insurance**

To be extended to cover the activities of a Retrofit Assessor

### **Record retention**

To ensure that records generated to demonstrate compliance with the requirements of this scheme document are retained for as long as the Retrofit Assessor remains a member of the scheme

### **Assessing suitability**

To become a member and maintain membership, the Retrofit Assessor must be able to demonstrate the competence to meet the requirements of Appendix 2.

- Code of Conduct.
- The existing Code of Conduct must be extended to include the activities of the Retrofit Assessor and meet the minimum requirements specified by TrustMark.

### **Continuing professional development**

Retrofit Assessors must undertake at least ten hours of CPD per annum to ensure that their knowledge remains current.

## **Surveillance**

### **Retrofit Assessment Report (RAR) Audit Process**

#### **General Requirements**

- TrustMark Technical Monitoring results will be fed into the Schemes' risk model & vice versa
- Scheme Auditors must be competent & suitably qualified Retrofit Assessors
- Schemes will ensure that where a Retrofit Assessor is fulfilling multiple roles on a project, or where a conflict of interest exists, this has been declared to the client as per PAS 2035 6.1.5 and is resolved appropriately.

#### **What is being audited?**

The RAR will be audited as per PAS 2035 – Section 8. This will be dependent on the Risk Path for the project.

- Risk Path A will encompass the requirements of section 8.3.
- Risk Path B will encompass the requirements in section 8.4 in addition to those in 8.3
- Risk Path C will encompass the requirements in section 8.5 in addition to those in 8.3 and 8.4

#### **Audit calling process**

Schemes will audit a minimum of 2% of Retrofit Assessment Reports (RAR) per calendar year. Certification Schemes will monitor the percentage audited to ensure that they will succeed in meeting the minimum level, using their discretion during holiday periods and unforeseen lodgement activity.

The following are to be included in the scheme minimum requirement of 2% of RARs per calendar year:

- A member shall be subject to a minimum of 1% of RARs per calendar year.
- Follow on audits. Please refer to Audit Failure for more details.
- New Entrants are to be audited on one of their first RARs\*.

\*Where a Scheme permits registered Retrofit Assessors to directly lodge to the TrustMark Data Warehouse i.e. they have no direct visibility of lodgement data through their own systems, the audit regime will take account of this by, for example, requiring data/reporting from their member in a timely fashion to control the risk of non-compliant projects and/or lodgements. It may not be possible to identify the first lodgement.

## Audit Evidence Requirements

The assessor should supply sufficient evidence in for a third party to replicate the data inputs required to complete the RAR outputs.

### Audit Results

The RAR audit will result in a Pass or Fail outcome. The Auditor shall total the number of non-compliances and their type to determine the audit result. An audit shall be marked as a fail where 5 or more single **minor** non-compliance and/or any single **major** non-compliance have been identified.

Non-compliances are categorised as follows:

- *Minor Non-compliance:* No significant impact on the customer or other stakeholders associated with the non-compliance. The scheme will inform the member of the nature of the shortcoming and require evidence of action taken to rectify the non-compliance.
- *Major non-compliance:* Compelling evidence that the member has failed to meet the Framework, in a way that has had a major impact on the customer or other stakeholders. The member shall be suspended until the non-compliance is rectified. Major non-compliance shall be counted as a risk trigger against the member.

The scheme will consider the following factors when reviewing the impact of the non-compliance:

- The level of harm which flowed from the non-compliance
- Whether the non-compliance has occurred in other cases
- Whether other bodies have imposed sanctions in relation to the non-compliance
- Whether the member has accepted responsibility for the non-compliance
- Whether the member made a financial benefit from the non-compliance, or intended to make such a gain for themselves or a commercial partner

### Audit outcomes

**Pass** – the audit passes with no feedback

**Pass with comments** – the audit passes, however feedback is given, and this should be read and understood by the assessor. The report does not need to be replaced, but errors noted should not be replicated on future assessments.

**Technical Fail** – The audit fails on a technical basis. There will be one or more errors in the report which cause or contribute to a failure. The report or defective part of the report must be replaced by the assessor in line with the below replacement timescales. All errors must be acknowledged by the assessor and not replicated in future reports.

**Evidence Fail** – The audit fails on the basis that the evidence is not supplied, or not sufficient in quality to allow the audit to be completed. This may cover all or part of the report.

- Where evidence is missing/poor quality but available, then this can be supplied by the assessor following feedback and the audit can be reviewed. This evidence must then be passed onto the Coordinator following audit completion.
- Where evidence is missing and cannot be supplied, then the audit remains a failure.
-

- Where evidence is not sufficient in quality and cannot be supplemented by quality evidence then the audit remains a failure.

All evidence errors must be acknowledged by the assessor and not replicated in future reports.

## **Timescales**

### Timescales for submission

- All evidence must be submitted to the scheme within 5 working days of audit notification request.

### Timescales for audit completion

- All submitted audits must be completed within a timely fashion and as soon as possible.
- All completed audit feedback must be sent within 2 working days of audit completion.

### Timescales for replacement of defective RAR or element of RAR

- The assessor must replace and confirm the replacement of the defective RAR or element within 5 working days and confirm that the Retrofit Coordinator has been informed in writing.
- Where the assessor fails to replace the RAR or/and element of the RAR, the scheme shall inform the coordinator, so the impacts of these errors can be assessed and correct action to taken.

## **CPD Surveillance**

Accreditation Schemes will sample a minimum of 5% of members' CPD records each year to ensure the CPD obligations have been met.

## **Disciplinary action**

Schemes will have appropriate disciplinary procedures in place for any activity that does not meet the requirements of being a Retrofit Assessor include the likes of Audit Failure, CPD non-compliance and any breach of the Code of Conduct.

## **Audit failure**

- Where any audit fails to meet the quality standards Schemes will take appropriate action in which may include
  - The Scheme will agree with the Member suitable corrective actions to prevent re-occurrence
  - Accreditation Schemes will request one specific future lodgement for audit to ensure that the member has understood and is applying the knowledge/advice from the feedback provided. This is complete in the form of a follow-on audit.

- The Scheme will consider the likelihood that this is a systemic problem that may impact other submission by that assessor if there is a belief that the member is likely to repeat the error then the member should be suspended until corrective action has been taken
- The Scheme will liaise with the member to consider the implications on other RARs issued and
- The Scheme will identify defective RARs and it is the responsibility of the Retrofit Assessor to take appropriate action for these.
- The scheme will consider preventative action that it can take, in isolation or through the PAS2035 working group, to prevent re-occurrence with other retrofit assessors

### **Code of Conduct**

Schemes will respond to breaches of the Code of Conduct by the member in a proportionate way.

Where there is compelling evidence that a member has not complied with the Code of Conduct and, there is a major impact on the stakeholder(s). The member will be suspended pending a disciplinary hearing.

Where a member's actions are considered a 'major transgression', the Scheme will immediately suspend the member, pending an investigation which should be carried out in a timely manner.

Repeated instances of less significant breaches may, in combination, be considered a major transgression.

### **Bringing the Retrofit of Buildings Industry into disrepute**

Where a Scheme believe and have strong evidence that the member is bringing the retrofit of buildings industry into disrepute, the member shall be suspended across the industry immediately pending further investigations and if the claims are proven, revoke the membership.

### **Fraud**

If the error indicates fraudulent practices, the member will be suspended across the industry immediately pending a full investigation.

Where a further investigation confirms that fraudulent activity may have taken place the Scheme must report the issue to the relevant authorities. If the retrofit assessor is alleged to have acted in a way that is in breach of the criminal law, then it is a matter for the criminal justice system. Schemes will report complaints, or other information received, that involve apparent criminal activity to the police.



## Notification to TrustMark

Schemes shall keep TrustMark informed of any suspected fraudulent or dishonest practice on the part of a member or members. This should be done in line with the requirements set by the latest version of the TrustMark Framework Operating Requirements.

## Supplementary conditions

The Scheme will impose appropriate controls to reduce the likelihood of any re-occurrence and to re-establish confidence in the activities of the assessor. Schemes will ensure that any disciplinary measures are proportionate to the breach and are implemented in a timely manner.

The Scheme may take whatever action it deems necessary to enforce the scheme rules. Members who do not comply may be prevented from operating on a temporary or permanent basis.

Where a member fails to adhere to the requirements set out in this document then;

Schemes have the ability to take necessary remedial action to ensure the risk of repetition of the offense is mitigated.

Example suitable remedial action could include (but not limited to);

- Corrective action to mitigate the risk
- Further surveillance such as;
  - Follow on auditing
  - Professional interview
  - Witnessed assessment
- Further training or retraining

Failure or repeated failure by the member to meet this remedial action may be prevented from operating on a temporary or permanent basis;

- Scheme only temporary suspension
- Industry wide temporary suspension
- Scheme only permanent revocation of membership
- Industry wide permanent revocation of membership

Temporary suspension can be applied in appropriate circumstances, this can be scheme only, or industry wide. The duration of any suspension and the criteria for reinstatement shall be determined by Schemes based on their assessment of the nature of the error after a thorough investigation. A member will normally be suspended until they complete the activities identified by the Scheme.

Permanent removal (revocation) of membership can be applied in appropriate circumstances, this can be scheme only, or industry wide.

### **Complaints**

- The scheme shall extend their complaints process to include complaints about the activities of a Retrofit Assessor.
- Schemes must give consumers access to an Alternative Dispute Resolution Service, as an alternative to the courts, in cases where a complaint cannot be resolved to the satisfaction of both parties.

### **Appeals**

- The scheme shall extend their appeals process to include complaints about or by Retrofit Assessors.

### **Support**

- Support to the public: Schemes will provide general information to the general public and stakeholders concerning Retrofit Assessment reports issued by members.
- Support to Members: Schemes will provide a helpdesk for members.

## Appendix 1 Assessment Process

Where the assessor or coordinator are unsure of the risk pathway, the Assessor should proceed as a Path B assessment (as per Section 8.4 of PAS 2035). This should be considered the default pathway.

The assessment shall include:

- an appraisal of the dwelling's heritage, architectural features, structure, construction, and condition, in sufficient detail to establish the suitability of the dwelling for improvement.
- identification of the installed building services (ventilation, heating, hot water and lighting systems and their controls), the locations of the equipment, the areas served and confirmation that the systems are working;
- identification of any constraints imposed by the local planning authority (including requirements for planning permission, Listed as of Special Architectural, Protected or Historic Interest, Conservation Area constraints, Tree Preservation orders, etc.);
- identification of any energy efficiency measures already installed or proposed.
- an appraisal of the dwelling's construction in sufficient detail to establish the thermal transmittances (U values), and moisture properties of the main building elements (exposed floors, walls and roofs), and the suitability of the dwelling for improvement.
- a measured survey to establish the overall dimensions of the dwelling's heat loss envelope (including any basements and attics), the dimensions of all building elements (exposed floors, external walls, roofs, etc) and the dimensions of all window and door openings;
- identification of constraints imposed by the site, e.g. elevation and exposure (to sun, wind and rain, major roads and industrial activity); access, party walls, rights of light, consideration of adjoining properties, etc.;
- identification of the location and severity of any existing construction defects, structural defects or leaks that relate to the energy efficiency recommendations being made;
- an appraisal of occupancy, including the number of occupants and any special considerations such as the presence of vulnerable persons, e.g. children or elderly people, or those with disabilities;
- an estimate of annual fuel use, fuel costs and carbon dioxide emissions, under standard or actual occupancy (as appropriate), made from fuel bills or by using a recognised methodology such as SAP or RdSAP.
- an assessment of the existing ventilation arrangements, including:
  - identification of the location and severity of any condensation and/or mould growth in the dwelling;
  - any intermittent extract ventilation fans or passive stack ventilators and where they are located;
  - any background ventilators (air inlets or 'trickle ventilators'), and where they are located;

- any other ventilation system and where it is located, including: single-room heat recovery ventilators (srHRVs), positive input ventilation (PIV), whole-house mechanical extract ventilation (centralised cMEV or decentralised dMEV), and mechanical ventilation with heat recovery (MVHR);
- Whether the identified ventilation systems are functional.

Where necessary the Retrofit Assessor may also recommend the commissioning of;

- a test of the air permeability of the building envelope, using an approved method;
- a structural engineer's report on the structural condition of the building and its suitability for any proposed improvement measures;
- other relevant in-situ tests (e.g. pull-out tests to establish suitability for proposed fixings).

### **Reporting the assessment**

The whole-dwelling assessment, including the ventilation assessment, the SAP/RdSAP data file and a photographic record of all the recorded features of the building and of any identified defects, shall be recorded and reported to the Retrofit Coordinator via lodgement to the TrustMark Data Warehouse.

See Appendix 4 for Requirements for the Retrofit Assessment Report

## Appendix 2 – Competence Requirements

A Retrofit Assessor must be an accredited Domestic Energy Assessor and have received at least twenty hours of additional training relevant to the Retrofit Assessor role; at least twelve hours of which must be classroom based.

Module	Title	Scope
<b>Introduction</b>		
	PAS2035	Overview of PAS2035, the other roles involved, link to PAS2030
	Trust Mark	Overview, including data warehouse, property passport
	Initial Risk Assessment	What it is (routes A, B and C), how it works, and impact on Assessors
	Energy Efficiency Advice	Covered by all roles in PAS2035 – see separate Annexe for more detail for Assessors
	The benefits of deep retrofit	What is deep retrofit and why whole house assessments are required.
<b>Building Physics</b>		
	U-values	Understanding thermal transmittances ( <i>U</i> values) of building elements (i.e. floors, walls and roofs, etc.) from data on the thermal conductivities ( $\lambda$ values) of building materials. What makes good U values, and what makes poor U values
	Condensation	Understanding the risk of interstitial condensation within the construction of a building element, using data on internal and external temperature and humidity and on material moisture contents and vapour pressures
	Linear Thermal Bridging	Understanding linear thermal transmittances ( $\psi$ values) and critical temperature factors ( $f_{Rsi}$ ) at the corners, junctions and edges of building envelopes that are identified as “thermal bridges”, i.e. places where the envelope of insulation is either thinner or discontinuous;
	Heat Gains	An understanding of overall heat gains in a dwelling from occupants, cooking, hot water, lighting, the use of appliances and solar gains through glazed openings
	Ventilation	Understanding of the whole-dwelling ventilation rate required to maintain good IAQ and minimize the risk of condensation and mould growth
	Mould	Understanding of the risk of surface condensation and mould growth using temperature factors and data on internal and external temperature and relative humidity to calculate vapour pressure differentials
	Moisture	Understanding dynamic moisture equilibrium through a building element

	Solar gain	Understanding of internal daylight levels from data about the sizes, locations and orientations of windows, and any local shading, and therefore requirements for artificial lighting.
	SAP and PHPP overview	Familiarity with SAP and PHPP principals and models, and differences to RdSAP
<b>Occupancy Assessment</b>		
	Occupancy Assessment process	An appraisal of occupancy, including the number of occupants and any special considerations such as the presence of vulnerable persons, e.g. children or elderly people or those with disabilities
		In-depth knowledge of the OA Methodology, with ability to advise consumer's around inputs and calculation results
		In-depth knowledge on recommendations and all results from Occupancy Assessment
		Be able to deliver the necessary advice on how occupancy variables affect energy use and savings from installing measures
		Be able to explain 'in use factors' and how they affect measure savings.
		Be able to explain the impact of fuel costs on the running costs and savings of measures
<b>Condition Assessment</b>		
	Heritage buildings	Be able to make an appraisal of the dwelling's heritage, architectural features, structure, construction and condition and the installed building services (ventilation, heating, hot water and lighting) in sufficient detail to establish the suitability of the dwelling for improvement;
	Building Structure	Be able to identify the location and severity of any existing construction defects or structural defects or leaks.
	U - Values	Be able to make an appraisal of the dwelling's construction in sufficient detail to establish the thermal transmittances ( <i>U</i> values) and moisture properties of the main building elements (exposed floors, walls and roofs) and the suitability of the dwelling for improvement
	Moisture, mould and Ventilation, condensation, trickle vents etc.	Be able to conduct an assessment of the existing ventilation, including:  identification of the location and severity of any condensation and/or mould growth in the dwelling;  any intermittent extract ventilation fans or passive stack ventilators and where they are located;  any background ventilators (air inlets or "trickle ventilators"), and where they are located;

		<p>any other ventilation system and where it is located, including single-room heat recovery ventilators (srHRVs), positive input ventilation (PIV), whole-house mechanical extract ventilation (centralized cMEV or decentralized dMEV), and mechanical ventilation with heat recovery (MVHR);</p> <p>whether the identified ventilation systems are functional.</p>
	Dimensions above RdSAP	Be able to complete a measured survey to establish the overall dimensions of the dwelling's heat loss envelope (including any basements and attics), the dimensions of all building elements (exposed floors, external walls, roofs, etc) and the dimensions of all window and door openings
	Planning constraints	Be able to identify any constraints imposed by the local planning authority (including requirements for planning permission, Listing as of Special Architectural or Historic Interest, Conservation Area constraints, Tree Preservation orders, etc.);
	Site constraints	Be able to identify any constraints imposed by the site, e.g. elevation and exposure (to sun, wind and rain, major roads and industrial activity) access, party walls, rights of light, consideration of adjoining properties, etc.;
	Structural defects	<p>Be able to identify construction defects or structural defects or leaks, or condensation and/or mould growth in any dwelling(s), including identification of such defects in two categories:</p> <ul style="list-style-type: none"> <li>• defects that need to be repaired before any retrofit work can proceed; and</li> <li>• defects whose repair is recommended but not an essential prerequisite to retrofit.</li> </ul> <p>Relative to the measures to be insulated</p>
	Identify existing energy efficiency measure(s)	As per RdSAP assessment
	Estimating energy use and cost	The data collected shall be sufficient for an estimate of annual fuel use, fuel costs and carbon dioxide emissions, under standard or actual occupancy (as appropriate) to be made by the Retrofit Assessor, Retrofit Coordinator or Retrofit Designer, using a recognized domestic energy model such as the Reduced Data Standard Assessment Procedure (RdSAP), the Standard Assessment Procedure (SAP) or the Passive House Planning Package (PHPP).
	Condition Report	Be able to create a condition report that gives all required information to the Retrofit Co-ordinator

## Appendix 3 – Provision of Advice

A Retrofit Assessor must be able to provide suitable advice, as detailed in the below table.

Element	Scope
<b>Technology</b>	
Fabric (Thermal) Insulation	Understand nature of different parts of the property which can be thermal improved such as walls, roofs, floors; and the generic techniques to achieve better performance
Heating & DHW	Understand current heat and hot water provision and potential alternative retrofit solutions and the impact on energy, warmth, cost and emissions.
Micro Generation	Understanding of current microgeneration solutions available that can be modelled in the methodologies
Household electrical appliances	General understanding of typical household appliances and their impact on energy use
Monitoring consumption	General understanding of how occupants can monitor energy usage and benefits of doing so
<b>Retrofit</b>	
Choice of products/tech	General advice around energy retrofit measures, based on standard products as defined in RdSAP and OA outputs. (Independent of manufacturers)
Use of equipment	General advice around use of energy efficient products
Cost and savings of improvements	Using the outputs of RdSAP and OA software advising consumers on what costs and savings are predicted
Finance	General knowledge of any grants and finance and where to signpost consumers towards for independent advice
Explaining the customer journey through the PAS framework	Understanding of the other roles within PAS framework and the customer journey.
<b>Behavioural Issues</b>	
Use of heating, DHW and controls	How to use controls effectively to manage energy efficiency of the home
Use of electrical appliances	How to effectively use and manage energy efficiency of the appliances around the home
Use of monitoring equipment	How and why to monitor use of energy in the home, including current bills and smart meter technology etc.
Using Passive Solar and retaining heat	General understanding of passive solar gains in the home and tips surrounding retaining heat in homes
On site renewables	Making the most of any on site renewable technologies
<b>Consumer and Services</b>	
Consumer rights – energy supply, energy efficiency and Micro Generation	General understanding of consumer rights with regards to supply of energy, the journey through the PAS, and consumer rights under TrustMark and any additional rights in regards to Microgen
Regulations, rights in rental sector	Understanding of all current regulations on landlords and tenants e.g. MEES/PRS, in order to help these consumers, make informed choices around the energy efficiency of the home



Choice of suppliers and tariffs (& switching)	General understanding of consumer bills, understanding tariffs and the process of switching supplier(s)
Awareness of Grants and Funding for energy efficiency measures	General understanding and awareness of current grants, subsidies and polices in energy efficiency such as FiTS
Understanding energy bills and payment options	Good understanding of reading energy bills and different payment options, with advice around alternative options
Understanding energy usage and costs	Linking the bills to total energy usage and costs within the property including use of heating, hot water, lighting and appliances
Fuel Debt	Understanding of what fuel debt is and how to manage it
Services for vulnerable households	Understanding energy efficiency implications for vulnerable households
Details of impartial advice	Ability to point consumers towards further independent energy advice (retrofit advisors)
Fuel related benefits/grant	Knowledge of any current fuel related benefits of grants available
Redress for energy supply & retrofit	General understanding of redress for energy supply and also for all the component parts of the TrustMark/EHC process
<b>RdSAP &amp; SAP and Occupancy Assessments</b>	
RdSAP Appreciation	In-depth knowledge of the RdSAP Methodology, with ability to advice consumer's around inputs and calculation results
RdSAP Outputs	In-depth knowledge on recommendations and all results from RdSAP
OA Appreciation	In-depth knowledge of the OA Methodology, with ability to advice consumer's around inputs and calculation results
OA outputs	In-depth knowledge on recommendations and all results from Occupancy Assessment
SAP Appreciation	Understanding of SAP methodology in order to deal with any queries relating to the methodology or outputs
<b>Related Health Issues</b>	
Health and comfort in relation to the indoor environment	General understanding of health and comfort in the home, adequate temperatures, appropriate ventilation etc (build tight, ventilate right)
Ventilation	Good understanding of ventilation issues and requirements to allow for a healthy home
Avoiding condensation damp and mould growth	Good understanding of techniques for avoiding condensation, damp and mould growth in homes
Affordability of energy services	General understanding of cost and affordability of potential energy efficiency measures

## Appendix 4 - Requirements for Retrofit Assessment Report

### Retrofit Assessment

Retrofit Assessors will need to upload relevant data and documents to the Data Warehouse. This will be dependent on the Risk Path Assessment outcome (A, B or C). They will upload the required documents and information through Accreditation Scheme portals.

#### Data:

The following data will be uploaded:

- TrustMark Lodgement Reference
- Scheme Reference
- Building Address
- Date of Assessment
- Retrofit Assessor Details and License Key

#### Document(s)

The following documents will be uploaded:

- Energy Report - which provides a SAP score, estimated costs and CO2 emissions, recommendations for improvement and the levels of savings possible
- RdSAP Inputs – the data that was collected and assumed in the production of the energy report
- OA Inputs - Data that has been entered to reflect the occupant lifestyle that impacts upon the energy calculation
- OA Report - which provides updated estimated costs and CO2 emissions, and recommendations for improvement and the level of savings possible, based upon actual occupancy where occupancy and fuel costs and usage are available.
- Condition Report the physical state of the dwelling at the time of the assessment related to features that may inhibit the performance of any future energy efficiency measures, typically containing photographs and a written description.
- Traditional Constructed Buildings Assessment – where required by PAS 2035, e.g. if the dwelling is traditionally constructed ensure that a simplified BS 7913 significance assessment is uploaded
- Ventilation Risk Assessment – where required by PAS 2035, giving an appraisal of the current ventilation present in the property, and whether it is sufficient or insufficient.
- Advice - where advice is given to persons, the Retrofit Assessor needs to document:
  - Who was the advice given to and when
  - What advice was given e.g. fabric first approach of PAS2035, how to use boiler controls effectively etc.

Please note the documents:

- do not have to be singular, they can be combined, as long as the information above is covered
- are likely to be PDFs or similar