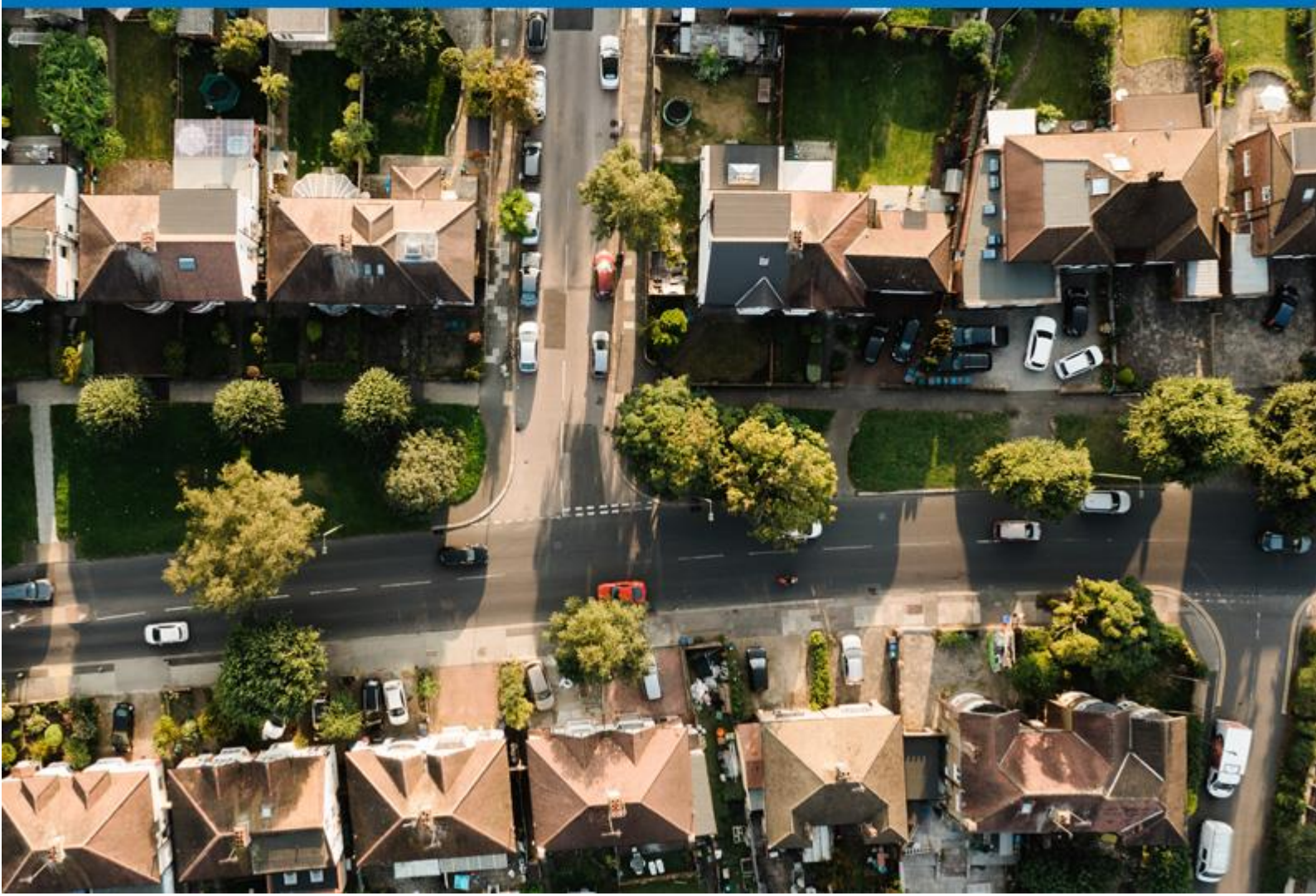




# Retrofit Assessments Standard Guide

Version 2.4



Our Standard Guide aims to assist Retrofit Assessors in providing key information required for compliant project coordination. Consistently accurate assessments streamline project workflows.

## **Table of Contents**

**Page 2 - Check List**

**Page 3 - Risk Assessment & Intended Outcomes**

**Page 4 - The PAS Assessment**

**Page 5 - The RdSAP Assessment**

**Page 6 - Ventilation**

**Page 7 - Significance Survey & Photo Evidence**

**Page 8 - Floor plans**

## Check List

### Floor plan including locations of:

- Consumer Unit/Fuse Board
- Extract Fans
- Radiators with TRVs if present
- Thermostat
- Area of each room
- Height of each floor
- Window position and area/size
- Boiler/heating system
- Hot water cylinder (if present)

### Photographs of the property as per energy data requirements and pas assessment requirements with the addition of:

- Meters
- Consumer Unit/Fuse Board
- Air bricks
- Condition of the joists and rafters
- Damp Proof Course, or evidence if not present
- Door undercuts, location and depth – as per Ventilation page
- Condition, damp etc
- All elevations
- Internal Photographs
- Extract Fans – internal and external photos

### Good Practice

- Double check all measurements and ensure extensions are used appropriately
- Ensure all photos are date/time stamped and geo-tagged

## Risk Assessment

Your job as Retrofit Assessor is to take the first step in assessing the quality of a dwelling before any retrofit work can take place.

For each project, the outcome of the retrofit risk assessment is an aggregate risk grade for that project of A, B or C. The risk assessment.

The criteria looked at are:

- Number of dwellings in the project
- Number of measures per dwelling, over 5 measures is a Risk Path C
- Measures Proposed
- Combination of Measures (Measure Interaction Matrix)
- Construction and build form
- Conservation Area or Listed Building

**The inherent Technical Risk can only be lowered for SWIGA, IAA (loft insulation cannot currently be reduced as it is not classed as a system) and MCS Membership.**

Please ensure that the correct number of measures and properties are entered into the Proposed Energy Efficiency Measures Section on the PAS App.

Any property that is in a Conservation area or is a listed building is a Risk Path C and if traditional in construction then the Retrofit Assessor also needs to have a Level 3 Traditional Buildings qualification.

As the Retrofit Assessor you are not required to undertake a fire risk assessment, however if you see anything regarding a fire risk then you are professionally bound to let someone know.

## Intended Outcomes

Intended outcomes are the outcomes required by the customer and shall take into account the initial condition of the building(s), it is for you to ask the customer what it is they want out of the retrofit process.

Please advise the customer if their intended outcomes may be unrealistic as regards to the property type and construction.

## PAS Assessment

The Condition Report provides specific and unique information about the property highlighting areas for concern and should be expanded descriptions. Acceptable examples of a condition report feature below:

### DPC & External Walls

There is a visible DPC which is approximately 100mm from the ground level and appears to be in good condition with no missing sections or broken streams. The external walls have a brick and render coating with no apparent cracks seen during the assessment. No plant foliage growing through the brick. Mortar missing in some areas to the gable/flank and seem to have been repointed previously.

### Roof

From the external view there is no obvious damage to the roof tiles, around the chimney some repointing will be required. From within the roof space there is no daylight entering, joists and rafters all appear to be in good condition with no noticeable damp or wood rot to be seen. Roof felt again in good condition with no holes or tears visible.

### Windows and Doors

Windows are constructed from UPVC with a 16mm glazing gap. Thermal bars present. No condensation present within the window glazing panel however slight black mould has been seen. No trickle vents within the windows. Windows do open and close with no sticking or locking. No other issues found. Entrance door is made of UPVC and has no visible damage or sticking when opened or closed.

### Internal Walls

There are surface cracks to the plaster in the lounge, bedroom one, bedroom three and the bathroom. The crack in bedroom three would warrant further investigation to the angle and shape. Walls within the kitchen were damp to the touch and the occupier has mentioned this is whenever cooking is completed. There are no vented extractor systems installed within the kitchen. The bathroom has a ceiling mounted extractor which can be seen within the loft and venting to the exterior however this was not in working order at the time of the assessment.

### Floor Structure

Stamp/Tap tests were carried out in all rooms. Exposed wood flooring was found in the understairs cupboard confirming the construction. Although some floors were creaking this would be associated with the age of the property however, any necessary additional checks should be carried out prior to any applicable EEM.

### Penetrative/Rising Damp

Rising damp seen within the ground floor toilet. No ventilation installed or purge installation available within this room. Further investigations should be carried out prior to any applicable EEM installation.

### Mould/Condensation

Mould found around the window in the lounge, no trickle or core vent found in this room. No other mould or condensation found.

**Note: Supporting this report, photographic evidence should be provided.**

## RdSAP Assessment

Assessors need to be careful when entering property descriptions and measurements; please treat the assessment as if you were producing a full EPC on the property with regards to photographs and information and please refer to the latest RdSAP Conventions if you have any queries. The Retrofit Coordinator needs to make recommendations to the owner regarding relevant improvements for the property and cannot do that if the property has not been entered correctly on the RdSAP report. Besides a different construction date or type, any part of the property that has a different floor, a different roof or different insulation needs to be entered as an extension (up to 4 extensions can be entered). For example, a property with a room above a garage should be entered as an extension above a semi-exposed unheated space.

Where two different constructions exist within the same building part, remember to use alternative wall. Please also take care when entering a room in the roof (please refer to the RdSAP Manual).

The floor plan will be detailed and accurate, please see the floor plan section of this guide.

**Double check all measurements.** If a measurement is incorrect or information is missing on the RdSAP report then it will be returned until the information has been corrected.

**Note** - all openings should be measured and captured through extended glazing entry.



## Ventilation

Evidence of all the currently installed ventilation must be provided. This allows for upgrades to be highlighted where required.

Key ventilation evidence requirements are:

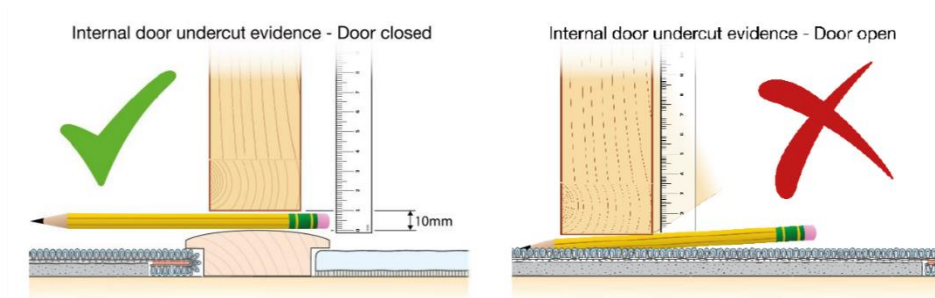
- Extract ventilation\* (\*\*\*)
- Background ventilation
- Purge ventilation
- Door undercuts\*\*

\*Please confirm with the occupant/owner that extract is working / ask them to demonstrate functionality, and ideally measure and evidence flow rate with UKAS calibrated vane anemometers/volume flow hoods.

\*\*to ensure good transfer of air through the dwelling, there should be an undercut on all internal doors of measuring a minimum area of 7,600mm<sup>2</sup> (10mm on a standard 760mm width door).



Door undercuts must be evidenced with the door closed and with a suitable measure to indicate the undercut depth. Ideally using an engineering gauge (rather than a tape measure or rule, however this is still acceptable providing clear measurements are provided).



\*\*\*Note, as from the 1st April 2022, extract flow rates will need to be evidenced as part of the latest PAS2035 update.

## Significance Survey

Please ensure that you are accurately recording any historic or specifically relevant features within a traditional building, including windows, walls, roofs, floors and internal features.

Please also screenshot any conservation area information from local authority websites and listed building information from the relevant national historic listing website:

**England** - [historicengland.org.uk](https://historicengland.org.uk)

**Scotland** - [portal.historicenvironment.scot](https://portal.historicenvironment.scot)

**Wales** - [historic-wales-rcahmw.hub.arcgis.com](https://historic-wales-rcahmw.hub.arcgis.com)

## Photo Evidence

Photos are required to be annotated this can be done onsite with room marker see example below. Photos are to be clear and visible, and date/time and geotagged.



- Internal doors require a clear photo with the door closed and a measurement of the undercut whether it has one or not, also a photo is needed to state which room the doors belong to, to be compliant.
- Windows in all rooms (sizes can be separate table).  
Purge ventilation (all openable windows)
- All background ventilation including air bricks, mechanical ventilation and open chimney breast.
- Loft insulation and depth. Overview of loft
- Internal walls to show the condition including Mould and Condensation
- Photo of the emitters and heating controls.
- All openings to be measured and captured using extended glazing in RdSAP survey.
- All external elevation of the property, plus extensions.
- Clear photo of the Damp Proof Course
- Condition of roof, enlarging on camera, and orientation of roof.
- Any renewables already present.

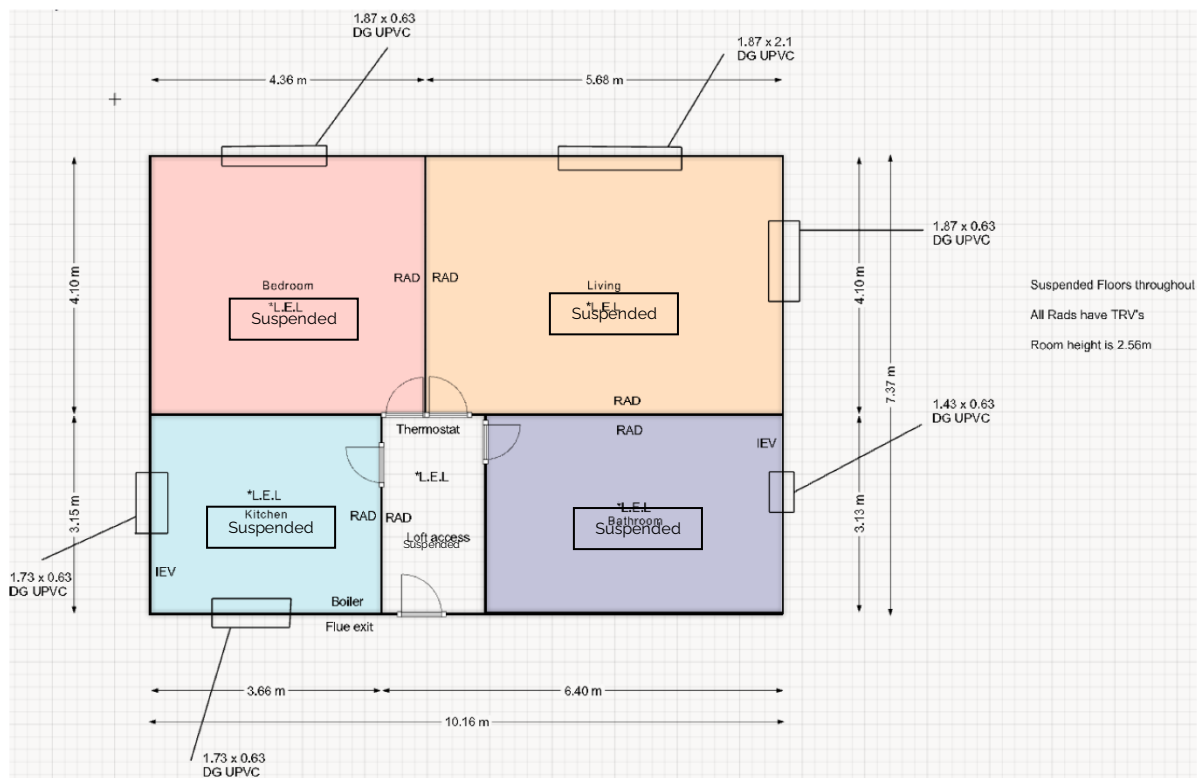


## Floor plans

Floor plans provide accurately detailed information of the layout of a property. Acceptable examples are a keyed drawn plan on graph paper or floor plan generated using software as featured below. The gold standard requires more detail than a usual floorplan, requirements in addition are:

- Height of each floor & Ground floor construction type
- Window position and area
- Position of openings / door opening direction
- Boiler
- Hot water cylinder (if present)
- Low Energy Lighting (\*L)

On the plan if there are any issues - example being damp, highlight the issues and position on the plan and add to key.



*Example of floor plans*