

RdSAP – Key Conventions

Welcome to the Course



1

Course Outline

Covering key RdSAP conventions, including:

- The use of RdSAP methodology
- Measurements and geometry
- Construction and Insulation
- Main & Secondary Heating
- Water Heating
- Lighting, recommendations & miscellaneous



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Introduction



- The conventions group consists of a representative from each certification body and a representative from BRE (representing DLUHC)
- The first ever conventions were issued in Sept 2009
- The purpose of conventions for RdSAP is to gain a consistent methodology and/or procedure for all DEAs
- Most recent ones issued go live from 6th August 2026

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USE OF RDSAP METHODOLOGY



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SAP v RdSAP



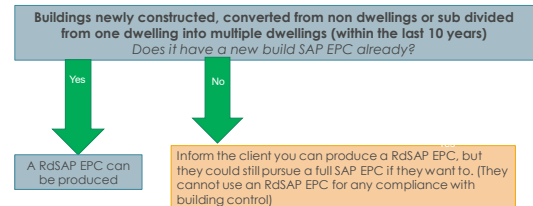
- RdSAP is for **existing dwellings only**
- Any new dwelling, (including conversions) should be initially assessed using SAP.
- If no SAP in place then RdSAP can be used, the client must be informed:
 - They cannot use an RdSAP EPC for any compliance with building control
 - They could still pursue a full SAP
- After 10 years from new build date, an RdSAP EPC is acceptable
- Refer to Scheme Guidance for use of RdSAP Assessment (See TB03)

Convention 1.01

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Properties built within the last 10 years



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Flat or maisonette

- A dwelling that does not extend to all storeys of the building is a flat or maisonette. RdSAP makes no distinction between flats and maisonettes as regards calculations; it is acceptable to select either type as definitions vary across the UK.



Convention 1.02a

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Definition of a bungalow

- A bungalow is a dwelling with all of the habitable accommodation **at the ground floor only**. This excludes chalet bungalows and bungalows with habitable loft conversions, which are treated as houses



Convention 1.02b

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Self-contained dwelling attached to or forming an extension of another building

- A property can have an additional building unit (e.g. an 'annexe') which, if it is self-contained, and meets the "building" definition, needs to have its own EPC
- A building altered for separate self-contained usage could be indicated by:
 - the accommodation having its own cooking and bathing facilities need to be fixed in place and should consist of a fixed oven, a sink and either two or four fixed hot rings. Two hot rings would suffice in a 1-bedroom dwelling and four hot rings in dwellings with more bedrooms
 - A dwelling would also require its own access (from the outside, or via a communal corridor)
- Presence of an internal door is not a deciding factor
- If a dwelling is made-up of several units with separate addresses but used as a single occupancy, then one EPC can be produced



Convention 1.04a

9

Not self-contained separate part of dwelling

- If there is a separate part of the dwelling which is not self-contained but contains rooms that are used as part of the main dwelling e.g. bedrooms, study etc.
 - If heated by the main heating system (as defined for the main dwelling), include in the assessment of the main dwelling and a single EPC for the main dwelling to be issued
 - Otherwise omit from the assessment



Convention 1.04b

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Conversions of heated buildings

After applying convention 1.01 for a conversion of a building converted into a house or flats

- for example a school, a hotel, a community hall or other) or where a dwelling has been subdivided (e.g. larger house converted to flats)
- Always use the original construction date** and specify upgraded elements only where documentary or visual evidence is available.
- Different in Scotland, can overwrite U values from table



Convention 3.05a

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Conversions of unheated buildings

- After applying convention 1.01 for a conversion of an unheated building
 - (e.g. barn, farm building, warehouse, mill building, train station, workshop or similar)
- Use the conversion date as the date of construction based on the documentary evidence**
 - e.g. the date of building control sign off or the date and details of installed insulation (if available) on the Local authority planning portal (England and Wales), relevant local authority Building standards Register (Scotland) or relevant District Council Building Control (Northern Ireland)
- Specify details of elements upgraded after the date of conversion only where documentary or visual evidence is available



Convention 3.05b

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Acceptable evidence

- Includes, but is not limited to
 - Official correspondence from the applicable Registered Social Landlord (RSL)
 - Certificates, warranties or guarantees
 - Any documents verifying that work has been carried out. (Not applicable in Scotland).
- The assessor must be confident, and able to demonstrate, that any documentation relates to the actual property being assessed, and/or the work has been carried out, and that there is no physical or other documentary evidence to the contrary.
- Evidence of intent to install does not **on its own** qualify as acceptable documentary evidence.

Convention 9.02



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Acceptable evidence continued England, Wales and Northern Ireland only

- Evidence of intent to install**, supported by evidence of subsequent Building Control oversight, or visual evidence that such an upgrade has been undertaken does qualify as acceptable documentary evidence.
 - a) If it can be demonstrated that there was both an intention to upgrade the element (in planning documents for example) and Building Control oversight of the work, the element can be treated as having been upgraded as indicated in the planning documents.
 - b) If it can only be demonstrated that **either** there was **an intention to upgrade** the element (in planning documents for example) **or** that **there was Building Control oversight** but it can **also** be seen that an upgrade has occurred, the element can be treated as upgraded using the minimum selectable upgrade of the relevant type defined in RdSAP. (If upgraded from 'as-built' to 'insulated' using the 'unknown insulation thickness' if you haven't got any evidence of what the insulation thickness is.)*
- *For roof insulation between joists use 100 mm as the lowest selectable insulation thickness.

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Recap

- What property type is selected for a chalet bungalow in the software?
 - A chalet bungalow has two storeys and therefore becomes a house in RdSAP**
- When is a detached self contained annex exempt from requiring an EPC?
 - A detached self contained annex is exempt from requiring an EPC if it has a floor area of less than 50sqm**

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Recap

- When are additional detached rooms, used as part of the dwelling, included as an extension in the assessment?
 - To include the additional rooms they must be heated by the main heating system as described in the EPC**
- A barn has been converted into a dwelling and the Building Control sign off document is available. Can you use the conversion date as the age built?
 - Convention 3.05b allows for the conversion date to be used with appropriate evidence**

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MEASUREMENTS

Measurements

- When measuring internally, measure between the finished internal surfaces of the walls bounding the dwelling. Where that cannot be done directly (i.e. when measuring room by room) include an allowance for the thickness of internal partitions.
- Measure to two decimal places (0.01m or better)
- Measure all perturbations e.g. bay windows
- False ceilings should be disregarded (i.e. where a room has a lower ceiling than the adjacent rooms.)

Concerns conventions 2.01 & 2.02



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Mezzanine floor

- Enter the part of the property above and below the mezzanine deck as a two storey extension. Treat the remaining part as a single level with the full floor to ceiling height.
- If the mezzanine is located such that it has no heat loss perimeter then assign a nominal 1 m perimeter to each floor of the mezzanine part and deduct 1 m from the heat loss perimeter of the other part.

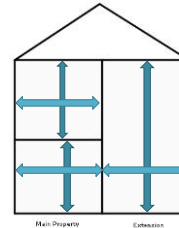
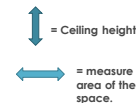


Conventions 2.10

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Mezzanines – How to Measure

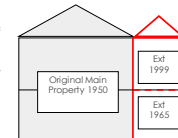
If there is a vaulted ceiling above either of the floors then you should average the ceiling height



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Vertical extension

- Where an upper storey in the dwelling has a different build date or construction type to the storey below, enter the upper storey as an extension with a floor type of "same dwelling below" and the lower storey with a roof type of "same dwelling above".
- Where the above applies to only part of the dwelling, the upper storey and the part directly below it are both entered by creating extensions.
- If the upper storey extends beyond the part below it, this storey will also require creating an additional extension to separate the part with "same dwelling below" from the part with a different floor type.
- A roof room cannot be a vertical extension in its own right.



Convention 2.11

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More than 4 extensions



- Add together floor areas and exposed perimeters of extensions (or add extension to main dwelling) to reduce to four extensions.
- Combine parts having the most similar age bands and thermal/construction characteristics (Section 6 of RdSAP 10)
- Use alternative wall where appropriate.

Conventions 2.12

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Sheltered wall length (unheated corridors)

- Always include a sheltered wall in the heat loss perimeter
- The sheltered wall can be in any building part (main or extension), but must be an alternative wall (only 1 allowed)
- When a dwelling (flat or maisonette) has a sheltered wall to an unheated corridor on more than one storey the sheltered length is the total for all storeys
- For example:**
2 storeys with sheltered wall of 5 meters on each storey:
Enter 10 m for the sheltered length

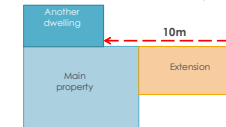


Convention 2.03

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Sheltered Wall

- Where the sheltered wall extends over more than one building part, e.g. it extends across the main and an extension, assign the sheltered wall length to the building part with the longer sheltered wall length and deduct the relevant amount from the heat loss perimeter of the other
- Example below:** record the extension as having the sheltered alternative wall length of 10m and deduct 2m from the heat loss perimeter of the main dwelling



Concerns convention 2.03

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Corridor or Stairwell?

Unheated corridor or stairwell

- Where more than one sheltered wall type is present (unheated corridor and unheated stairwell), use the sheltered wall type of greatest length as your input.
- For example, if a corridor is 10m in length (6m is stairwell and 4m is corridor) then enter 10m as being adjoining a stairwell.



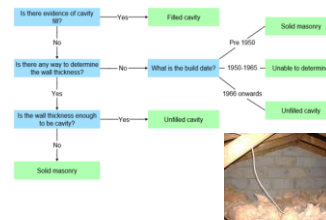
Convention 2.03

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Blockwork visible at party wall

- Basis for determining party wall type to be entered when stretcher bond brickwork / blocks face on only and laid upright are encountered and there is no other specific construction evidence.



Convention 2.24a

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Basements

- Basement is the floor of the building which is partly (at least 50% of the heat loss perimeter) or entirely below ground level. Walls that are above ground level should be treated as a different wall construction
- Include when accessed via a permanent fixed staircase such that one is able to walk downwards facing forwards and either:
 - basement is heated via fixed heat emitters, or
 - basement is open to the rest of the dwelling (i.e. No door separation)
- Does not necessarily contain habitable rooms

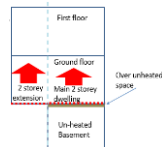


Convention 2.05

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Basements

- If a basement meets the criteria it becomes the lowest occupied floor and internal dimensions must be used throughout the assessment.
- If a basement does not meet the above criteria, it is not to be included in the assessment. In this scenario treat the floor above the basement as suspended floor, above unheated space.



Convention 2.05

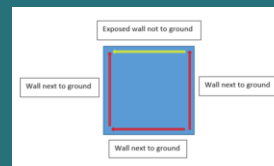
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Basements

Basement walls are those that are adjacent to earth and can be either main or alternative walls (see also 2.13) and are only included when the basement is heated.

Where a basement wall is adjacent to a neighbouring property treat it as a heat loss wall unless there is evidence that the neighbouring basement is heated as it then becomes a party wall.



Convention 3.17

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Porches

- On deciding whether to include in the assessment:
 - If heated always include (separated or not).
 - If not heated and thermally separated, disregard



Conventions 2.09

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Store Rooms and Utility Rooms

- If heated always include
- If unheated and thermally separate then always disregard (regardless of how you access it)



Convention 2.19

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Roof rooms / Attics

- Include when accessed via a permanent fixed staircase such that one is able to walk downwards facing forwards
- There is no explicit allowance for dormer windows except to include in the floor area of the roof rooms

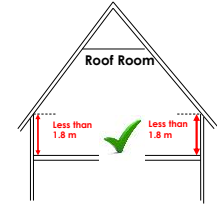


Convention 2.04

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Room in the roof

- For a roof room to be classed as such and not a separate storey, there must be no common wall, or the height of the common wall must be equal to or less than 1.8 m, for 50% or more of the common wall (excluding gable ends or party walls), otherwise it is a separate storey
- The common wall is a vertical continuation of the external wall of the storey below



Conventions 2.04

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Room in the Roof Types

Type 1

Fully in the roof
(No common wall present in the heated space)



Type 2

NOT fully within the roof where an accessible common wall is part of the Room in Roof.



Conventions 2.04

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Room in the Roof Types

RR Type 1 includes:

- No common walls.
- RR built into a roof space where RR stud walls are built inside the common walls, leaving the common walls outside the boundary of accessible floor areas. (Right)
- RR type 1 is always treated as "Room in Roof" regardless of the height of the stud walls. (The 1.8 m rule does NOT apply to RR Type 1)



Conventions 2.04 – Appendix 2

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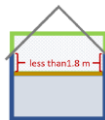
Examples of roof rooms with no common walls – Type 1



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Type 2



Measure from the floor to the point where the roof plane intersects with the wall head

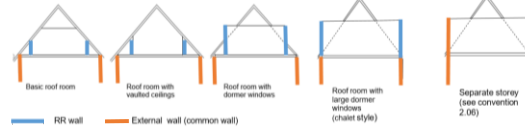
- Has an accessible vertical continuation of the external wall of the storey below which is less than 1.8 m for at least 50% of the common wall (excluding gable ends or party walls).

Conventions 2.06

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Removed - Different styles of Room in Roof



Appendix 2

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The options



Simplified

If no access to assess any insulation



Detailed

If any insulation visible in the ceiling/slope/stud/gable/common wall

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Assessment Type

- Simplified** – if no insulation visible in any element. This option does not require any measurements, except.
- Type 1** – The additional measurement of the length of the gable(s) will be required.
- Type 2** – The length and height of the gable is required.
- Similar to the 'unknown' option, no recommendation will be generated if this option is chosen.



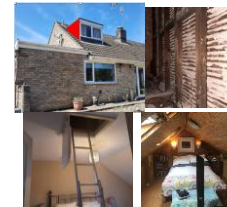
Conventions 2.06

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Detailed

- Detailed** – If any insulation visible in the:
 - ceiling/slope/stud/gable/common wall - all elements must be measured.
- Where more than two elements are present merge areas together and x 1.
- The appropriate recommendations will be generated.



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Warm Roof

- Where the stud wall (vertical elements) has no observed insulation, but the adjoining rafters/slopes are insulated (e.g., insulation continues to the eaves ie treat like a warm roof), record the stud wall as insulated to the same level and thickness as the rafter/slope insulation.
- This applies only where visual or physical evidence confirms the insulation extends to or abuts the stud/eaves junction without a significant uninsulated gap.



Conventions 2.06

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Example

- The floor area of the RR is **29.12m²**
- The dormer flat ceilings total **6.66m²**
- 20% of 29.12 = 5.82
- Therefore - the dormers are more than 20% of the floor area so they should be included.



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Age band for roof room

Age band is Same as the building part unless evidence proves otherwise.

Evidence for Room in the roof includes:

- Planning applications (can be a screen shot off council website)
- Building control sign off
- Dated architects drawings (Elmhurst decision)



Convention 3.13

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Age band for roof room

Evidence may also include:

- Dated photographs of the property concerned validating date of construction
- the evidence might establish the earliest possible date of construction if roof room is absent in photograph)
- Google street view has a time line that allows you to look at previous pictures of the property taken years ago, if this shows the room in the roof as absent then this could be used as the earliest date of construction.



Convention 3.13

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Whole dwelling (or building part) within roof

- When the property or a building part of it is a single storey entirely located within a roof, model as:
 - lowest occupied level
 - timber frame construction (if the gable end wall is different alt wall could be applied)
 - appropriate age band
 - room height must be entered as 2.2m
 - include area and perimeter measurements as a normal storey (HLP includes where stud walls meet outside walls or cold roof space)
 - enter roof as pitched roof



Convention 2.08

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Whole dwelling (or building part) within roof

- If there are two storeys within the roof, enter the lower storey as previous slide, usually alternative wall timber frame. The upper storey is entered as rooms-in-roof

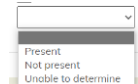


Concerns convention 2.08

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Draught Lobby

- An arrangement of 2 doors that forms an airlock on the main entrance to the dwelling, needs to be at least 2m²
- Should be that a person with a pushchair or similar can enter the lobby, then close the door behind them before then entering the main dwelling.
- Should lead into a further circulation area (Hallway) and not directly into any habitable rooms.
- Examples include:
 - Thermally separated Porches (heated or unheated)
 - Corridors leading to flats unheated or heated



Convention 2.09b

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Defining a conservatory

- Defined as a building part where 50% or more of the external heat loss walls are glazed and where 75% or more of the roof is glazed. In circumstances where the roof of a conservatory no longer meets the above definition because the roof has been replaced or a false ceiling has been added the conservatory must be recorded as an extension specifying the below;
- If either visual or documentary evidence is available record insulation present.
- If the roof is less than 10 degrees in pitch enter as flat with insulation unknown.
- If the roof is more than 10 degrees in pitch enter as pitched, no access and insulation as none
- If the roof is more than 10 degrees in pitch and there is access to the loft void see convention 3.04



Convention 2.28
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WINDOWS AND DOORS

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External Doors

- An external quality door is one which provides resistance to external environment and forms part of the HLP of the dwelling
- Multiple doors are counted as 2 doors
- A door to an unheated access corridor is part of the sheltered wall. If there is a second external door in the property it is directly to the outside
- It is possible for a property to have no external door in the RdSAP data set
- Door to a heated access corridor is not included

External Doors



Convention 3.09

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External Doors

- A door is counted as insulated only if documentary evidence is provided, which must include U-value or manufacturer's reference enabling the assessor to ascertain the U-value from the manufacturer
- If there is more than one insulated door and they have different U-values, enter the average U-value



WICKES TAMBOR PRG-4000 UPVC DOOR
 Dimensions: 2041 mm H x 813 mm W
 Door Weight: 20.0 kg
 External Frame Depth: 115 mm
 Door Thickness: 45 mm
 Door Material: UPVC
 External Frame Material: UPVC
 Opening Direction: Left Hand
 Glass: None
 Panel: Solid
 Panel Thickness: 10 mm
 Locking Mechanism: 10 mm
 Standard Wall Type: Part 1
 Opening Type: Double
 Door Weight: 20.0 kg
 U-value: 1.8 W/m²K
 External Frame Weight: 10.0 kg
 Glass Weight: 0.0 kg

For example wicks website shows all the u values of all the doors they sell. If you have a model reference then this u value can be overwritten

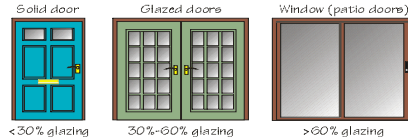
Convention 3.09

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Window Definition

- A window is an opening in an external wall or roof of a building, fitted with glass or similar material, usually in a frame, that admits light.
- A door may be treated as a window if it is considered to be highly glazed
- Examples of highly glazed doors are patio doors, fully glazed doors or French doors. Measure it and treat as a window if glazing area is 60% or more



Convention 2.14

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Glazed area

- Measure and enter the width and height of all relevant windows (including the visible frame) in accordance with convention 2.02.
- This is the overall width of the window between the internal reveals, and the overall height of the window between the inner sill and the top reveal.



Convention 2.15

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Glazed Area

- Relevant windows are all windows, highly glazed doors and roof lights (see convention 2.14) in the heat loss envelopes. This includes between the dwelling and:

- A separated conservatory
- An unheated corridor
- A porch (if the porch is excluded)

It does not include windows in a non-separated conservatory.



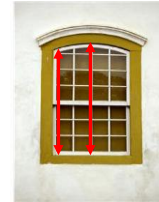
Convention 2.15

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Window area

- For arched windows enter the actual width and enter the height as the average between shoulder height and the height to the top point.
- For other unusually shaped windows, calculate the area by the most appropriate means. Enter the area as the width and enter the height as 1.

Window 1	
Width (m)	1.75
Height (m)	1.00
Area	1.75

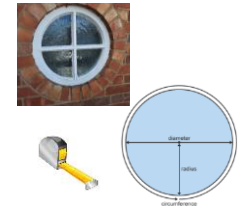


Convention 2.15

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Window Areas

- For circular windows, calculate the area using the radius (half of the diameter). First calculate the square of the radius (multiply it by itself) then multiply that by 3.14.
- For oval windows, multiply the longest radius by the shortest radius and multiply that by 3.14. For semi-circular or half oval windows, apply the approach above as if the other half were present and halve the result.



Convention 2.15

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Example

- If the radius of this circle is 29cm
- $0.29 \times 0.29 = 0.0841$
- $0.0841 \times 3.14 = 0.2640$
- So enter the width of the window as 0.26 then the height as 1



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Secondary glazing

- If secondary glazing with single glazing, record as secondary glazing. (Normal or Low-E if it can be determined).
- If secondary glazing with Age 1 double glazing, record as Age 2 double glazing. If secondary glazing with Age 2 double glazing, record as Age 3 double glazing.
- Age 1 means pre 2002 in E&W (2003 in Scotland, 2006 in NI). Age 2 means 2002-2021 in E&W (2003-2022 in Scotland, 2004-2021 in NI). Age 3 means 2022 onwards in E&W (2023 in Scotland, 2022 in NI).
- If secondary glazing has been removed in summer, enter as above only if assessor can confirm that the panels exist and can be re-fitted. Evidence to be recorded on site notes

★ Where there are unusual single glazing improvements, such as plastic glazing units over single glass or panes of glass, separated by large distances, treat as secondary glazing.

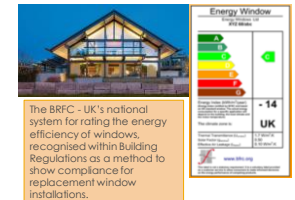


Convention 2.16

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Windows (U values and g-values)

- Default U-values and g-values can be overwritten and known data specified only if documentary evidence is provided
- Evidence can be either a Window Energy Rating certificate (as defined by BRFC) or manufacturer's data. The U-value is for whole window, not centre pane



Convention 3.10

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Glazing Age

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- Select unknown if there is no evidence of the install date
- Multiple glazed units can be dated via the following methods:
 - The manufacturing date on the spacer bar, or possibly on the frame
 - There is documentary evidence confirming the date of installation of the window e.g. FENSA / CERTASS / Building Control certificate or manufacturers guarantee
 - Property build date if after the following trigger dates: Post 2002 or 2022 (E&W), 2003 or 2023 (Scotland), 2006 or 2022 (NI) where applicable
 - Presence of thermal spacer bar indicates post 2002 (E&W) 2003 (Scotland) and 2006 NI
- If none of the above applies choose 'unknown'



Convention 3.12a

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Glazing gap

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- Glazing gap is the width of the spacer bar between the two panes of glass.
- If windows with non-metal frames are pre-2002 (pre-2003 in Scotland; or pre-2006 in NI) or unknown period, identify glazing gap depth to the nearest value to 6, 12 or 16 mm.
- If the gap cannot easily be identified, select either 6 (if narrow gap) or 16 (if wide gap)



Convention 3.12b

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Draught Proofing

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- External doors and windows
- If the state of the draught proofing cannot be determined then take triple, double or secondary glazed as being draught proofed, and single glazed windows and doors as not draught proofed unless there is a contrary evidence of draught-proofing
- Include glazing in a non-separated conservatory



Convention 3.11

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Shutters

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- The performance of internal or external shutters (with or without insulation) is recognised in RdSAP (Table 24).
- Shutters are hinged panels (usually of timber), which can be closed in order to fully cover a window. When open, these generally sit within the window reveal.
- They must be operational on the day of survey, confirmed by opening the shutter.
- They can be insulated by using a thin insulation material, such as aerogel blanket, within the panels of the shutters. This is often finished with a covering of timber; evidence needs to prove that they are insulated.



Convention 3.11b

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Dwelling adjacent to commercial premises

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- If a dwelling or part of a dwelling has commercial premises below record as partially heated space below.
- If a dwelling or part of a dwelling has commercial premises above or has an unheated space above (e.g. garage or an unheated corridor in a block of flats), record as non-residential/other unheated space.
- If a dwelling has commercial premises alongside it, treat the separating wall as a party wall.



Convention 2.21

71

Recap

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- To what precision (how many decimal places) must you measure to?
 - Measurements must be to an accuracy of 2 decimal places**
- A flat with a heated corridor, how is the wall described between the flat and the corridor?
 - The door between a flat and a heated corridor becomes a party wall**
- A basement has a fixed staircase that can be walked down forwards. How do you decide whether you are including the basement in your assessment?
 - Ascertain if there is any fixed heating and/or is the basement open plan to the dwelling above**

72

Recap

- A storey with a non vertical wall is described as a mansard when the pitch is at least ...? Pitch
 - The pitch of a mansard roof must be at least 70 degrees**
- An external door must be in the heat loss perimeter. Give two examples when a property would be entered having zero doors
 - A property with zero external doors would be a flat with a heated corridor or a property with only highly glazed doors to outside and these are recorded as windows in RdSAP**

73

WALL CONSTRUCTION AND
RETRO FITTED WALL INSULATION

74

Alternative Walls

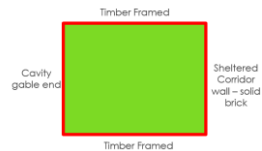
- An alternative wall can be:
 - A sheltered wall (to unheated corridor or stairwell), or
 - A wall that has a construction type or heat-loss characteristics (U-value) different from the main external wall, or
 - Both of the above
- Always include the alternative wall if it is sheltered, irrespective of size
- Where there is a construction type that needs to be included (eg more than 10% of area) of very poor thermal quality, (such as single leaf, uninsulated timber panel below windows) treat as a curtain wall.**



Convention 2.13

75

Alternative Walls



- RdSAP 10 allows for two alternative walls per building part to be input, but only one sheltered wall.
- If more than two alternative walls are needed, this can usually be dealt with by creating an extension.
- Disregard non-sheltered alternative wall(s) if less than 10% of the total exposed wall area of the building part (including windows and doors).

Convention 2.13

76

Alternative walls

- For stone walls assess thickness at each external elevation and at each storey and use alternative wall if the thickness varies by more than 100 mm, see also Convention 2.22



Convention 2.13

77

Wall thickness
(per building part)

- Measure wall thickness in mm of each external wall (elevation) and any alternative wall within a building part. Evidence is required for each different thickness
- It can be measured at door or window reveals or by internal/external measurement comparison (which can be direct measurement or estimated by counting bricks)
- Where thickness varies a little for the same construction use the average of the measured values (See also 2.13)



Convention 2.22

78

'Any Wall insulation Issues'

- **'An access issue'** applies to any elevation where it is not possible to pitch a 5m ladder having regard to Health and Safety requirements. This includes, a narrow passageway, a busy thoroughfare, a building of more than two storeys and where a conservatory or large outhouse is attached to the property
- **'A narrow cavity'**, wall is indicated by a stretcher bond brick pattern with wall thickness 220mm to 250 mm
- **'Possible high exposure'**, should be recorded for any dwelling in exposure zones 3 or 4 (see the map) - if in doubt record possible high exposure

- Any Wall Insulation Issues
Cavity wall insulation recommended (Main)

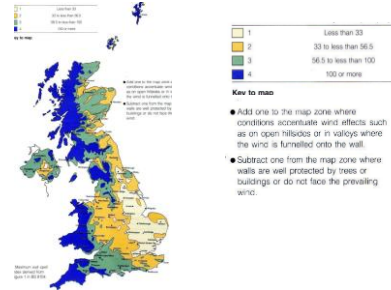
☐ Has the property any 'Access Issues' for potential wall insulation?

☐ Has the property any 'narrow cavity(s)' (<50mm)?

☐ Is the property in a 'high exposure' location?

Convention 9.10

79



Convention 9.10

80

Curtain Wall

- An independent building element, may contain translucent and opaque parts, may extend across party walls and floors, are fitted in or connected to frames.
- It is an outer covering of the building; the curtain wall façade does not carry any structural load from the building, other than its own weight.
- Opaque panels must be treated as a curtain wall of the relevant age band **with any translucent areas measured and entered as glazing.**
- If documentary evidence is available, use calculated u value for whole curtain wall.



Convention 2.27

81

Loft Access

- Where safe and practicable access to the loft is possible, loft insulation should be measured and photographic evidence provided of its measured thickness.
- 'No access' means there is no loft hatch or other means of gaining access to the loft space
- If there is a loft hatch or other means of gaining access but it could not be used on the date of the site visit (e.g. if it has been painted over, or an obstruction is preventing access for health & safety reasons) record as 'access, loft insulation unknown'

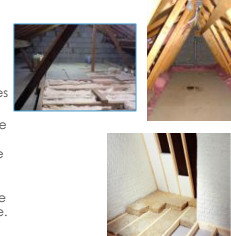


Convention 3.04

82

Boarded/obstructed lofts

- If loft insulation fully obstructed enter 'unknown' unless:
 - householder has documentary evidence (maximum thickness is depth of joists)
 - or is prepared to lift the boards or removes obstructions.
- If the loft, or part of the loft, is boarded and the assessor can establish and evidence the insulation present under the boards at multiple locations below the boarded area (visible through gaps or extending in from the edges) the boarded area is treated as insulated to the thickness that can be proved by the evidence.



Concerns convention 3.04

83

Rafters and joists insulation

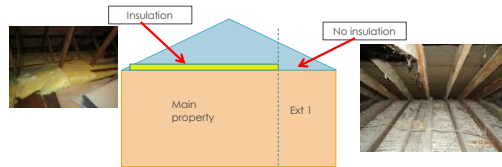
- If joist and rafter insulation are both present base the assessment on the joist insulation only
- If varying levels are present, apply an area-weighted average
 - e.g. 200mm over half a loft, then 100mm over the other half. An average of 150mm can be entered into the RdSAP software



Convention 3.04

84

Splitting a property



- If there is an area with no insulation the dwelling should be split into building parts to allow different roof insulation scenarios

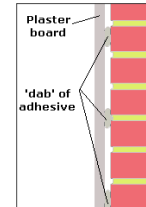
Convention 3.04

85

Identifying internal wall lining

- This includes any type of internal lining that creates an airspace behind it
 - e.g. plasterboard on dabs, lath and plaster
- Use tap test for plaster board on dabs or on battens
- If tap test is inconclusive regard as not dry-lined
- Dry lining alone does not confirm the presence of insulation
- Applies to stone, solid brick walls or cavity walls age band A-E

Convention 3.06



86

'As built'

Assume "as-built" if there is no evidence of retro-fitted insulation, including:

1. a pitched roof with sloping ceiling insulation or a flat roof where there is no documentary evidence
2. a roof space with rafter insulation if no evidence of retro-fitted insulation
3. roof rooms where there is no access and no documentary evidence



Convention 3.03a

87

Unknown insulation type

- Use **Unknown** in exceptional circumstances such as:
- When there is conflicting evidence (inspection and/or documentary) of added insulation whose presence cannot be ascertained conclusively
- For a fully boarded or obstructed loft unless the householder has documentary evidence (maximum thickness is the depth of the joists) or is prepared to lift the boards
- Where there is a pitched roof and no access to the loft space or access prevented (see 3.04) and no documentary evidence.



Convention 3.03b

88

Unknown insulation thickness

- "Unknown insulation thickness" should be used only in exceptional circumstances, such as:
- conflicting evidence of insulation thickness (visual and/or documentary)
- when you can see insulation present but cannot measure its thickness

Convention 3.03c



89

Insulation Thickness

- If insulation is multifoil (multi-layered blanket-type insulation which contains at least three layers of foil-type material) the thickness is doubled
- Any insulation can be doubled in thickness (apart from where it is present on solid brick and stone walls age bands A-E*) if there is documentary evidence of the type of insulation and manufacturer's information that the lambda-value (thermal conductivity) is equal or less than 0.025 W/m.K. If thermal conductivity is more than 0.025 W/m.K. then divide the thickness of insulation by two (e.g. vermiculite)
- If there is both internal and external wall insulation add the insulation thicknesses together and enter as external



Convention 3.07

90

Lambda Values

- For Solid Stone/Brick In age Band A-E only, if internal or external insulation is specified
- If documentary evidence confirms the insulation's thermal conductivity, select the appropriate λ -value (or closest), or, if not available the options below should be applied (where **visual or documentary** confirms presence):
- 0.04 W/m·K** - mineral wool, rock wool, fibre glass or EPS (expanded polystyrene)
- 0.03 W/m·K** - XPS (extruded polystyrene)
- 0.025 W/m·K** - PUR (polyurethane foam), PIR (polyisocyanurate), phenolic foam



Convention 3.07
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Wall Insulation Types



Mineral Wool



Extruded Polystyrene



Expanded Polystyrene



PUR or PIR Boards



PUR or PIR Boards

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92

U-value entry (walls, roofs, floors)

- The U-value must be that of the whole element, including any additional insulation.
- Documentary evidence applicable to the property being assessed (see convention 9.02) must be provided and recorded if overwriting any default U-value. This evidence shall be either:
 - Relevant building control approval documentation, which both correctly defines the construction in question and states the calculated U-value
 - A U-value calculation produced or verified by a suitably qualified person
- Evidence of suitably qualification is through membership of a recognised U-value calculation competency scheme (BBA/IMSA (UK)), OCDEA or level 4 non domestic energy assessor membership, or any other process recognised by accreditation schemes/approved organisations and Government

Convention 3.08

93

Blocks of flats

Used to be 'Properties greater than 4 stories'

For the purpose of RdSAP record the construction of the heat loss walls (e.g. cavity, solid brick, stone, timber framed, system build) of the dwelling being assessed and not the construction of the overall superstructure. Ensure that addendum 1 is selected. If there are multiple wall construction types within the heat loss perimeter of the dwelling being assessed follow convention 2.13 for alternative walls. If cavity construction is identified (and retro-fit cavity insulation is therefore recommended) where the dwelling is on the third storey or above select 'Access issues' from 'Hard to treat cavity wall' addenda.



Convention 3.14

94

Recap

- There is 50mm of insulation at rafters and 50mm at joists. How do you enter this into the software?
 - Ignore what is at rafters and only enter the joist insulation
- What evidence is required if you are going to enter a wall as being dry lined?
 - Simply a tap test on the wall, there is no requirement for documentation

95

Recap

- A property has a roof room but there is no access above the flat ceiling or behind the stud walls. What assessment type should be entered?
 - Simplified Room in the roof
- If you are going to double the insulation thickness measured for a floor, what do you need evidence of?
 - The exact type of insulation and the lambda value from the manufacturer's website

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SPACE HEATING



97



Heat Emitters

- Where one system is serving both radiators and underfloor, specify the same heat source as main heating 1 and main heating 2 following the rules in convention 4.07 (except for heat pumps).
- If Heat Pump serves both radiators and underfloor, enter radiators when they are serving 50% or more of the total floor area.
- Where the same proportion enter the emitters as underfloor.** Where a cast iron range-style cooker boiler is present treat the cooker as a radiator



Convention 4.01a

98



Single rate meter/Dual rate appliance

- Single meter** with an off peak system
- Enter as panel heaters and/or immersion as single, and include **Addendum 6**



6. Storage heater or dual immersion, and single electric meter

Suppress recommendations for upgrading storage heaters inappropriately

Convention 4.02

99



Heating/Water system missing or not working

- Any fixed heating or hot water source and/or heat emitters fitted/installed but not working (or condemned) should still be taken into account when deciding on the primary and secondary heating and **direct Hot Water type**.
- If heating source or heat emitters not fitted/installed, enter no heating system or do another survey when the heating system is installed.
- If heating source or heat emitters are present but not accessible for inspection and no documentary evidence is made available, the assessment cannot be completed until access has been provided (excluding community heating).

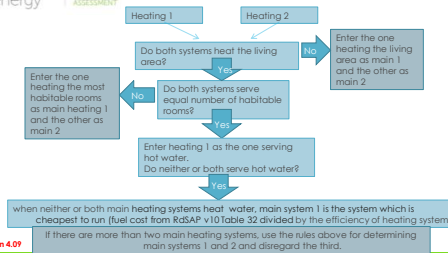


Convention 4.03

101



Two main systems?



Convention 4.09

102



Two main systems

- When there are two main systems:
 - If they serve different spaces, the percentage recorded for each system is in proportion to the heated floor area served by each system
 - If they serve the same heating circuit the default assumption should be a 50/50 split. A different ratio can only be used if there is clear documentary evidence to back this up.
 - If a recommendation is made for heating system upgrade, include addendum 9.



9. Two main heating systems and heating system upgrade is recommended

Convention 4.09

103

Two main systems

- Main Heating 1 or 2 cannot be room heaters, except in the case of the dwelling's heating consisting solely of room heaters
- A second main system is not to be confused with a secondary heater
- If there are only room heaters in the dwelling and there is more than one type of room heater (e.g. gas fire and an electric fire) and they both heat habitable rooms, follow the rules for defining main 1 and 2.
- If one of them heats a habitable room, and the other one in non-habitable room, treat as main and secondary heating respectively.

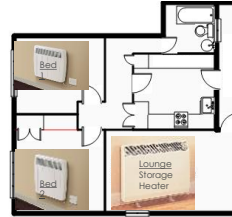


Convention 4.09

104

Two main heating systems

- Therefore in this example:
- Main heating 1 = storage heaters
- Secondary heating = Panel heaters
- 3 Heated habitable rooms



Convention 4.09

105

Storage heater in non-habitable room

- Where the **sole** source of heat is a storage heater in a non-habitable room, include it as main heating, and count it as one heated habitable room



Convention 4.26

106

 Electric combi boilers

- Space heating provided by an electric combi boiler should be recorded manually as a Standard boiler, direct acting, fuel type electricity.
- For water heating from an electric combi boiler refer to convention 6.08.



Convention 4.22

107

Definition of Community Heating

- A system in which a heat generator provides heat and/or hot water to more than one premises
- Each dwelling supplied by the system is to be assessed individually
- If the heat generator is in the dwelling, it is entered as the heating system for that dwelling, i.e. if a boiler is situated in a property but the boiler also supplies another dwelling it is simply input as the boiler type (rather than as 'community heating')
- If the heat generator is not in the dwelling, it is entered as 'community heating' in the software



Convention 4.65a

109

Definition of 'Heat as a service'

- A Heat-as-a-Service system, regardless of whether the generator is inside or outside the dwelling, shall be treated as community heating where the service provider owns and/or operates the heat generator.
- Specific documentary evidence must be provided to confirm the presence of a Heat-as-a-Service installation.
- Where the service is powered by electricity, use community heat pump. In other circumstances, use community boiler



Convention 4.65b

110

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Time and Temperature Zone controls



- A system of controls that allows heating times of at least two zones to be programmed independently, as well as having independent temperature control
- It includes wired or wireless remote or mobile control systems.



Convention 4.17

112

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Heating controlled by mobile app

- Heating control from a mobile application can only be included where a fixed receiver is present and there is evidence of the type of controls (time, temperature, zone).



Convention 4.19

113

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Heating Pump Age

2012 Or Earlier	2013 or later	Unknown
Select if pump age not known Or no EEI markings visible	EEI rating visible on pump Date of manufacture on the ID plate For pumps inside boilers only ask for paperwork if replaced	Pump not visible or inside boiler casing
		

Convention 4.18

114

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Secondary Heating Selection

- Include if fixed emitter present regardless of whether main system(s) heat all rooms
- If more than one secondary:
 - select the device that heats greatest number of habitable rooms
 - If the same choose cheapest fuel
 - If same fuel select the device with the lowest efficiency
- Electric focal point fires fixed to the wall are included even if not wired by fixed spur
- A fixed heater in non habitable rooms are still counted as a secondary heater
- Where a solid fuel or oil range cooker (no boiler) is present treat as a closed room heater



Convention 5.01

115

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Storage Heaters

- If a high heat retention storage heater is identified but it is not in the PCDB database, enter as fan-assisted storage heater.



Convention 4.09

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WATER HEATING

117

Encased hot water cylinders

- For a modern unvented pressurised steel or plastic encased hot-water cylinder (e.g. Megaflo) or factory fitted jacket, treat insulation value as 50 mm factory-applied foam and assume "cylinderstat is present".
- For Ebon (wooden box) type record the actual thickness as factory applied insulation and check for the presence of a cylinder stat. 'No access' is an acceptable option.
- Hot water thermal store – if the appliance is physically separate treat as cylinder



Concerns conventions
4.08 & 4.09

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118

Cylinder insulation

- If factory insulated plus a jacket, enter the thickness of foam insulation plus 1/3 the thickness of the jacket.
- If for some reason the thickness cannot be measured,
- Assume 25mm for spray foam and 12mm for jacket.
- Elmhurst note: any factory fitted insulation is entered as spray foam



Convention 4.05

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119

Hot water cylinder stats

- Cylinder stats - include only when mounted on the side of the cylinder and has an electrical connection.
- Note: a TRV installed next to a cylinder is not counted as a cylinder stat



Convention 6.07

120

Other Domestic Hot water

- Disregard a small water storage volume.
- A "small" volume means less than or equal to 55 litres;
- If the storage volume exceeds 55 litres, it is specified as an electric immersion or gas boiler for water heating only.
- If water is heated by electric combi, specify water heater as "instantaneous at point of use"

Electric shower

- If the only water heater is an electric shower, specify as 'electric instantaneous water heating'

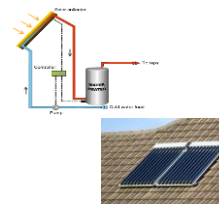


Conventions 4.08 & 4.09

121

Solar water heating

- Documentary evidence is required to over-write collector or solar store values
- Orientation, tilt and over-shading can be overwritten with visual evidence
- If the panel/collector details are available but the solar store information is not, the default values can be used for the solar store
- Further detail in the convention document

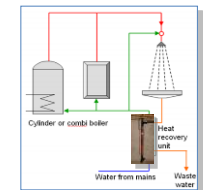


Convention 9.09

122

Waste Water Heat Recovery

- For instantaneous and storage types and when no/unknown WWHRs present.
- The total number of baths within the property.
- Total number of baths connected to WWHRs (if present).
- Type and number of non-electric showers.
- The shower must be permanent i.e. not temporarily attached to bath taps when in use.
- If shower connected to WWHRs – Instantaneous or Storage should be selected.



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123

Recap

- When the only heating at a property is a storage radiator in a hallway, how should this be entered into the software?
- Enter the storage as the main heating and count one heated habitable room**
- If there are two different types of storage radiators in habitable rooms, how are these entered into the software?
- Two types of storage are entered as MH1 and MH2**

124

Answers

- How are zone controls defined in RdSAP?
- It must be possible to have two separate areas/zones that can be timed separately and temperature selected separately**
- How is a hot water thermal store entered into the software?
- A hot water thermal store is entered as spray foam, 50mm and assume a cylinder stat**

125

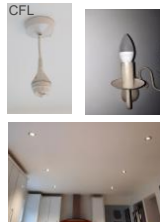


LIGHTING & VENTILATION

126

Lights

- The Number of lamps is counted (not the number of fittings). Consider all lamps (bulbs or tubes) in permanent fittings within the dwelling, this includes:
 - Fixed under cupboard kitchen lights.
 - Wall and ceiling lights
- If an individual lamp is missing, or the lamp type cannot be identified, record as CFL.
- If more than 50% of the lamps which are not Incandescent cannot be identified or are not present, record all non-incandescent lamps as LEL.

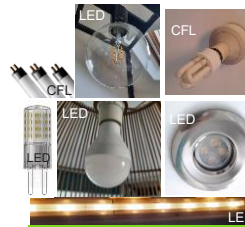


Convention 7.01

127

Lights

- Only LED lamps are recorded as LED
- Any Fluorescent Tubes and Compact Fluorescent lamps are recorded as CFL
- LED strips are counted as one lamp per running meter (rounded to the nearest meter).
- Tungsten and Halogen lamps are recorded as Incandescent (i.e. are not low energy).



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Open Chimneys

Open Chimneys

- Defined as a vertical duct for combustion gases of diameter 200mm or more, or a rectangular duct of equivalent area (125,000 mm²). Include all open chimneys / fireplaces in the count (both downstairs and upstairs) only when they are unrestricted and suitable for use.

Convention 9.01
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129

Open Chimneys

- Include:
 - Chimney attached to a decorative gas fire
 - Chimney fitted with a damper
 - Temporarily blocked using cardboard, newspaper bungs, chimney balloons and similar
 - Decommissioned chimney that is provided with a ventilation area greater than 30,000mm², otherwise it is treated as a blocked chimney.



Convention 9.01

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New wording

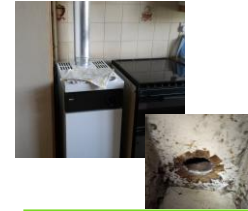
- A chimney/fireplace can be decommissioned with the fireplace filled in and the chimney stack capped or removed completely. A chimney may require ventilation to manage moisture through the provision of air bricks, for example when it is on an external wall. In some circumstances a chimney can be sealed completely (i.e. no air bricks are required) in which case it does not need to be counted as a chimney in an RdSAP assessment.
- However, where a decommissioned chimney has air bricks installed, this needs to be considered in RdSAP. Specifically, a decommissioned chimney that is provided with a ventilation area less than 30,000mm² is treated as a blocked chimney, i.e. modelled with a flow rate of 20 m³/hr. If a chimney is open it is modelled with a flow rate of 80 m³/hr.
- Other cases which should be treated as open chimneys:
 - chimney attached to a decorative gas fire,
 - chimney fitted with a damper,
 - temporarily blocked using cardboard, newspaper bungs, chimney balloons and similar and,
 - decommissioned chimney with a ventilation area greater than or equal to 30,000mm².

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Open Flue

- A vertical duct with a diameter less than 200mm should be counted as a flue. This includes the case where a flexible gas flue liner is sealed into the chimney as this reduces the diameter to less than 200mm.



Convention 9.01

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Fireplaces and flues

Number of chimney/open flues attached to closed fire

Chimney or open flue attached to wood or solid fuel stove/appliance with controlled air supply.



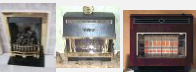
Number of open flues attached to solid fuel boiler

Chimney or open flue attached to wood or solid fuel boiler



Number of open flues attached to other heaters

Open flue gas fire with flue products outlet sealed to the chimney including radiant gas fires and ILFE (Insert Live Fuel Effect or Insert Living Flame Effect)



Convention 9.01

133

Mechanical Ventilation

Mechanical ventilation systems circulate fresh air via ducts and vents and use continually running fans when in operation.

They can be input-only, extract-only or balanced (input and extract).

Where make and models details are available the system should be entered via the PCDF.

In circumstances where there is no evidence of the make and model the system must be entered using the defaults.

If vents (excluding air bricks) are present within the property and the presence of mechanical ventilation cannot be confirmed enter the number of vents as passive stack.

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Wet Rooms

Applicable when chosen from the PCDF

Spaces where significant moisture is added to the air, including kitchens, utility rooms, bathrooms, shower rooms, and rooms with flush toilets or urinals.

Bedrooms with hand basins are not considered wet rooms.



Convention 7.03b

135

Duct Type

Applicable when chosen off PCDB

Decentralised systems

The two duct types are:

- **Rigid:** Solid, inflexible ducting, usually plastic, no movement.
- **Flexible:** Made from flexible plastic over a wire coil, forming a tube.



Convention 7.03c

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Duct Insulation

- **Level 1** - For supply or extract (whichever is longer) duct lengths need to be established.
- Where it is less than or equal to 2m, the duct system must be continuously insulated throughout to a minimum depth of 25mm with an insulated thermal conductivity of 0.04 W/m.K or less.
- Where it is greater than or equal to 2m, the duct system must be continuously insulated throughout to a minimum depth of 50mm with an insulated thermal conductivity of 0.04 W/m.K or less



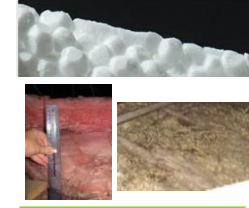
Convention 7.03d

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Insulation

- 0.040 W/m.K
- Mineral wool, rock wool, fibre glass or EPS (expanded polystyrene)
- Most other insulation types will have better values than these (e.g. extruded polystyrene, PUR or PIR boards)



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Duct Insulation

Level 2 - Is where Level 1 is not satisfied or the insulation specification is not known.

Where the duct placement is outside the heated envelope it will need to be established whether the duct is insulated or uninsulated.

See convention 3.07 (Insulation thickness) for insulation types and equivalent thermal conductivity values



Convention 7.03e

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Two Mechanical Ventilation Systems

- Where two mechanical ventilation systems are present in a dwelling, the following logic will apply:
 - If the systems are identical, choose this system and input with half the number of wet rooms.
 - If the systems are different, input the system which can be selected from the PCDB.
 - If both systems are available from the PCDB, or both are default systems, input the system based on the following order of precedence:
 - Mechanical ventilation with heat recovery
 - Mechanical ventilation
 - Mechanical extract ventilation
 - PIV from outside
 - PIV from loft

Convention 7.03e

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Two Mechanical Ventilation Systems

Notes

1. This is taken from the SAP 10.2 specification - 2.6.9(a). Halving the number of wet rooms reflects that two systems are in effect halving the load. This also benefits the PCDB data as it may not include SFP data for higher wet room numbers.
2. Database input allows you to input the systems you're able to physically evidence and being present. Whilst this differs from a 'worst-case' option, it provides an actual system to input, and a more accurate calculation because of it.
3. Order of precedence is a sliding scale of the functionality of the mechanical ventilation system. It remains to be seen whether a dwelling would have both MEV(c) and MEV(dc), so these are bundled together.

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Air Tightness

- This is the measured air permeability figure ($\text{m}^3/\text{m}^2/\text{hr}$) from either a blower door (50Pa) test or a low-pressure pulse (4Pa) test.
- The pressure test result must be RdSAP default values and must not be overwritten unless specific documentary evidence is available.
- Documentary evidence will be via a pressure test certificate that has been produced by a person with suitable expertise and experience.



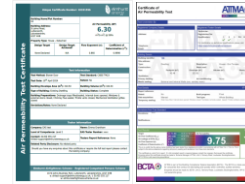
Convention 10.01

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Air Tightness

- Evidence of suitable expertise and experience can be demonstrated by membership of a recognised air tightness Competent Persons Scheme (EAS or AITMA), that is approved by Government.
- **If material changes have been made to the property since the original test, the certificate becomes invalid for RdSAP entry.**
- Results from background ventilation tests are not included in the assessment.



Convention 10.01

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Photovoltaics

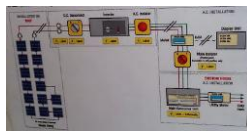
- When photovoltaics are present the peak power (kWp) of the PV array is required. Potential sources include:
 - the system specification documents
 - the schematic wiring diagram (possibly adjacent to the electricity meter or the consumer unit).



Convention 9.05

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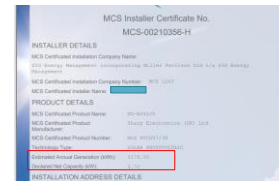
Example - Schematic drawings



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Example MCS Certificate

- If the peak power (kWp) cannot be found, the declared net capacity (DNC) stated on the MCS certificate may be used instead.



Convention 9.05

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Photovoltaics

If there are PV panels on different planes of the roof, enter as separate systems. If only a total kWp or DNC value is provided, estimate the relative area of each and apportion the value accordingly.



For example:
The paperwork you have been provided states a total output of 4kWp, approximately half facing east and the other half facing west. Therefore enter two panels of 2kWp each.

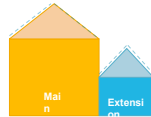
59.0 Photovoltaic Panel						
Photovoltaic panel						
PV Cells kW Peak	Orientation	Elevation	Overshading	Connected		Add new
2.00	East	45°	Significant	Yes		
2.00	West	45°	None Or Little	Yes		

Convention 9.05

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Photovoltaics

- If the kWp or DNC cannot be ascertained, do not allocate the PV, except where it is connected to a meter serving a single dwelling.
- Where the meter is serving a single dwelling, record the percentage of the total roof area occupied by PVs.
- The total roof area includes main dwelling and all extensions where present.



Convention 9.05

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Photovoltaics

- PV connection to the dwelling's meter must be verified by the presence of a PV generation meter or documentary evidence.
- In all cases, the PV-generated electricity is included in the assessment of a dwelling only if the dwelling has a PV generation meter serving it.
- Where it cannot be determined that the PV supply is feeding into a meter serving the dwelling being assessed, the PV panels are still allocated to the dwelling but should not be specified as being connected.



Convention 9.05

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Photovoltaics

- Where the PV supply is serving more than one building, or multiple dwellings within the building, the total capacity of the PV is allocated between the buildings on an area weighted basis based on an estimate of the total floor area of all of the buildings or dwellings served by the PV.
- This applies in all scenarios where the PV supplies more than one building, or multiple dwellings within the building, including where the other buildings are either all dwellings, a mix of dwellings and non-domestic buildings or all non-domestic buildings.



Convention 9.05

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PV Battery Storage

- For PV batteries, photographic or written evidence of manufacturer and model of battery unit used, and usable capacity (kWh) is required. If this cannot be obtained, use a default of 5kWh per battery.
- Where an individual battery has a storage capacity greater than 5kWh, the PV battery shall be entered as two separate batteries. The first PV battery entry shall be 5kWh, with the excess being entered as a second battery.



Convention 9.06

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PV Diverter

- For PV diverters, written evidence of manufacturer and model of diverter system installed is required. If this cannot be obtained, then the diverter cannot be entered.



Convention 9.06

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New Technologies - Special Features

- The section 'Special features' allow for the selection of new technologies into RdSAP (with the use of Appendix Q from SAP)
- Technologies recognised by this mechanism can be found at the webpage <http://www.ncm-pcgb.org.uk/sap/page.asp?id=18> under the RdSAP 2012 and RdSAP10 headings.
- The webpage contains Excel spreadsheets that enable the calculation of energy savings and consumption for recognised technologies when installed in dwellings.
- Note that a spreadsheet must be used with the version of RdSAP that it was designed for. In particular, a technology may only be suitable for RdSAP10.



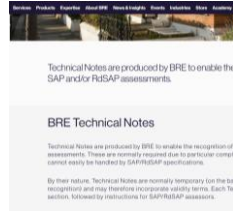
Concerns convention 9.15

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BRE Technical Notes

- Produced by BRE to enable the recognition of certain technologies Required due to complexities related to the technology's assessment that cannot easily be handled by SAP/RdSAP specifications
- Technical Notes are normally temporary (on the basis that future versions of SAP can incorporate recognition) and may therefore incorporate validity terms
- Each Technical Note incorporates a technical justification section, followed by instructions for SAP/RdSAP
- <http://www.bregroup.com/sap/bre-technical-notes/>

Convention 9.14



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Example of Technical Note listing

5	SAP Technical Note - Hybrid Heat Pumps in SAP 2009 and 2012	Instructions for SAP assessors to allow the recognition hybrid boiler / heat pump systems SAP 2009/2012 software. These instructions supersede the previous note "Temporary method for recognising hybrids in SAP 2009/2012 assessments".	SAP: YES RdSAP: YES	2009, 2012	31/07/20, 31/07/20	1.0 End date: N/A
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Convention 9.14

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Electricity meters

- Usually the dwelling uses either single-reading meter or a multiple-reading meter arrangement. Older properties may have two single-reading meters to record on-peak and off-peak readings (record as dual meter).
- If choosing a particular tariff, additional information should be gathered such as recent electricity bill.
- Otherwise, if tele-switch is present - treat as single, if a time-switch is present - treat as dual.

Convention 9.13



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Electricity meters

- Smart meters are meters that communicate wirelessly with the meter network which may have a variable tariff.
- They do not have to be functioning at the time of the visit (e.g. 1st generation meters) but the evidence must be either a smart meter unit or a portable display that shows meter readings

Convention 9.13



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Recommendation De-selection

- Should be removed only if there is documentary evidence showing that a specific recommendation is not appropriate, must be recorded in site notes.
- A listed building or a property in a conservation area is not sufficient grounds in its own right to suppress a recommendation.
- Further guidance on specific recommendations can be sought from an appropriate professional organisation, for example heating engineers, building control officers, product manufacturers, trade associations, etc.



Convention 8.01

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Did we miss anything?

- 1.03 - Address close to England/Scotland border
- 2.04a and 2.04b
- 2.07 - Mansard
- 2.17 - Sun room
- 2.23 - Staging area
- 2.24 - Party Wall
- 3.01 - Cavity Wall
- 3.02 - system build
- 3.03a - Timber frame with insulation
- 4.01a - Design floor temperature
- 4.04 - Micro-CHP not fitted in the PCIB
- 4.09a - Single Heating Systems with multiple outputs
- 4.11 - LPC at mains gas prices
- 4.12 - Bonus Convention
- 4.13 - BVS
- 4.15 - Electric CPSU
- 5.02 - Replace with grate
- 5.03 - Fuels for solid fuel fires and room heaters
- 6.04 - Separate water system
- 8.02 - Mains gas
- 9.03 - Incorrect EPC
- 9.04 - Cooling system present
- 9.06 - Flue gas heat recovery
- 9.07 - Wood fuel fire
- 9.11 - transaction type
- 9.12 - Tariffs
- 9.14 - Park homes

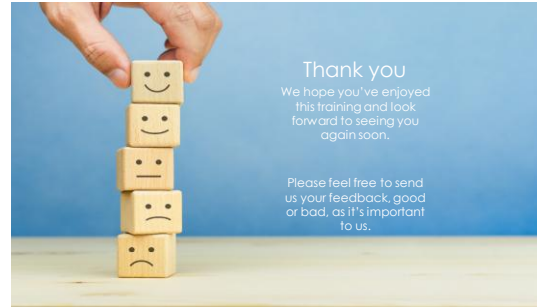
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Remember!

- To view the full set of RdSAP Conventions go to Technical Bulletin 24. This can be found in the 'My Documents' area and selecting the RdSAP file
- The conventions can also be downloaded by searching for RdSAP Conventions Version 11.4 on the internet

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