

## Agreed RdSAP Conventions

05 February 2010 (v2.0)

**New and amended conventions for v2.0 indicated by light blue background.**

Note: This list will be extended as appropriate.

#	Topic	Conventions	Issue date
<b>General</b>			
1.01	Use of RdSAP	RdSAP is for existing dwellings only. Any new dwelling, including dwellings created by change of use, must be assessed using SAP.	Sept 2009
1.02	Flat or maisonette	A dwelling that does not extend to all storeys of the building is a flat or maisonette. RdSAP makes no distinction as regards calculations; it is acceptable to select either type as definitions vary across the UK.	March 2010
<b>Measurements and geometry</b>			
2.01	Measurements	Measure all perturbations (e.g. bay windows) but disregard chimney breasts unless assessor considers significant e.g. large inglenook.	Sept 2009
2.02	Precision of lengths	Measure to one decimal place (0.1 m) or better. Retain higher precision when that has been measured (especially room heights).	Sept 2009
2.03	Sheltered wall length (unheated corridors)	Include in the heat loss perimeter.	Sept 2009
2.04	Habitable room count	For a kitchen to be a kitchen/diner it must have space for a table and 4 chairs. A lounge/dining room where the door was temporarily removed (ie architrave and hinges still there) is two habitable rooms. A lounge/dining room with the door permanently removed (hinge holes filled etc) is one habitable room. An non-separated conservatory adds to the habitable room count if it has an internal quality door between it and the dwelling.	Sept 2009

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2.05	Basements (whether to include in the assessment)	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.  Does not necessarily contain habitable rooms.	Sept 2009
2.06	Roof rooms / Attics (whether to include in the assessment)	Include when accessed via a permanent fixed staircase such that one is able to walk downwards facing forwards. Does not necessarily contain habitable rooms.  For a roof room to be classed as such and not a separate storey, the height of the common wall must be less than 1.8 m for at least 50% of the common wall (excluding gable ends or party walls). The common wall is a vertical continuation of the external wall of the storey below.  There is no explicit allowance for dormer windows except to include in the floor area of the roof rooms.  See appended diagrams.	March 2010
2.07	Rooms within a Mansard roof	A storey having non-vertical walls of at least 70° pitch constitutes a separate storey; it is not treated as roof rooms. Use alternative wall if appropriate.	March 2010
2.08	Whole dwelling within roof	When property is a single entirely located within a roof, model as: - lowest occupied level - timber frame construction of appropriate age band - room height must be entered as 2.2 m - include area and perimeter measurements as a normal storey.  If there are two storeys within roof, enter the lower storey as above and the upper storey as rooms-in-roof.	March 2010
2.09	Porches (whether to include in the assessment)	If heated always include (separated or not).  If external and not heated, disregard.  If internal, not heated and thermally separated, disregard.	Sept 2009

#	Topic	Conventions	Issue date
2.10	Mezzanine floor	<p>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/roof height.</p> <p>If the mezzanine is located such that it has no heat loss perimeter then assign a nominal 1 m perimeter and deduct 1 m from an actual heat loss perimeter.</p>	March 2010
2.12	Vertical extension	<p>Use one of:</p> <ol style="list-style-type: none"> <li>1) Enter new upper floor as an extension</li> <li>2) Make of use alternative wall for the new upper storey</li> </ol> <p>Record reasons for decision in site notes</p>	March 2010
2.13	More than 2 extensions	<p>Add together floor areas and exposed perimeters of extensions (or add extension to main dwelling) to reduce to two extensions. Combine parts having the most similar age bands (refer to SAP Appendix S for U-values of relevant constructions). Use alternative wall where appropriate.</p>	March 2010
2.13	Alternative wall	<p>Disregard when less than 10% of total exposed wall area of the whole dwelling (including windows and doors). When entering alternative wall area into software exclude the area of any windows and doors contained in the alternative wall.</p> <p>Consolidate walls of same type.</p> <p>If there are two areas of external wall of different construction types that should be regarded as alternative wall, use the one with the larger area.</p>	March 2010
2.14	Window area	<p>In RdSAP the definition of what is a window and what is a door is defined by the area of glazing in relation to the area of the whole opening, i.e. door and frame. To be classed as a window a glazed door and frame must contain glazing amounting to 60% or more of its surface area.</p>	March 2010

#	Topic	Conventions	Issue date
2.15	Glazed area	<p>Consider the whole dwelling (windows, glazed doors and roof lights), including any extensions (<b>but not conservatories</b>).</p> <p><b>Typical</b> applies if the surface area of the glazing in the dwelling is essentially as would be expected of a typical property of that age, type, size and character. Even if there is slightly more or less glazing than would be expected, up to 10% more or less.</p> <p><b>More than typical</b> applies if there is significantly more surface area of glazing than would be expected (15%-30% more), perhaps because there is a large sun room or numerous patio doors have been added.</p> <p><b>Less than typical</b> applies if there is significantly less glazing than would be expected. This is rare as homeowners tend not to take out windows, but a property may have an unusual design with few windows.</p> <p><b>Much more than typical</b> and <b>Much less than typical</b> should be used for those dwellings with very unusual amounts of glazing; such as a glass walled penthouse flat or a Huff Haus. Due to this option allowing measurements of each window to be accounted for, it can also be used if a dwelling has a mixture of glazing types e.g. single, double and triple.</p>	March 2010
2.16	Secondary glazing removed in summer	If secondary glazing has been removed in summer, enter as secondary glazing only if assessor can confirm that the panels exist and can be re-fitted. Evidence to be recorded on site notes.	March 2010
<b>Construction and insulation</b>			
3.01	Cavity wall type	Where a cavity wall has been identified, enter as such irrespective of the width of the cavity.	March 2010
3.02	System build type	If there is a system built wall that has evidence of retro cavity fill, record as system build with internal insulation.	March 2010

#	Topic	Conventions	Issue date
3.03	“Unknown” wall insulation	Do not use the “unknown” option for wall insulation inappropriately as this automatically suppresses any insulation recommendation; assume as-built if no evidence of retro-fitted insulation.  “Unknown” should be used only in exceptional circumstances, e.g. when there is conflicting evidence (inspection and/or documentary) of added insulation whose presence cannot be ascertained conclusively. In these cases clarification must be provided in site notes.	March 2010
3.04	Loft insulation	If joist and rafter insulation are both present record joist insulation only  If loft is fully boarded enter unknown unless householder has documentary evidence (maximum thickness is depth of joists) or is prepared to lift the boards  If the property has modern foil or foam insulation at joists the depth of the insulation is entered as double its actual thickness.  If varying levels, apply an area-weighted average. However if there is an area with no insulation the dwelling should be split to give different roof scenarios.	March 2010
3.05	Age band for conversions	For a conversion which was a change of use (e.g. barn converted to dwelling) enter conversion date as the age of construction.  For a conversion where a dwelling is sub-divided (e.g. house to flats) use the original construction date, unless there is documentary evidence that all thermal elements have been upgraded to the building regulation standards applicable at the conversion date.	March 2010
<b>Main heating</b>			
4.01	Heat emitters	If both underfloor and radiators, enter radiators. This is because if radiators are present there has to be a higher flow temperature.	Sept 2009
4.02	Storage heaters	If storage heaters are present as main heating but single meter – enter as panel heaters and include addendum 6. If the storage heaters are fan-assisted suppress the recommendation for fan-assisted storage heaters.	Sept 2009 amended March 2010

#	Topic	Conventions	Issue date
4.03	Boiler missing or not working	If boiler/heating system is present but not working (or condemned) it should still be entered as the main heating system. If boiler not present but intended – enter no heating system.	Sept 2009
4.04	Micro-CHP	If micro-CHP enter as condensing boiler and include addendum 5.	Sept 2009
4.05	Definition of community heating	A system that serves more than one dwelling.	Sept 2009
4.06	Fuel used by community heating	Try to find out what the fuel is. If it cannot be ascertained select mains gas.	Sept 2009
4.07	Heating controls	If the dwelling has only TRVs for heating controls of a boiler system select the option “no controls” (code 2101) and include addendum 7.	March 2010
<b>Secondary heating</b>			
5.01	Secondary heating	Include if fixed emitter present regardless of whether “central heating” heats 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 are included even if not wired by fixed spur.	Sept 2009
5.02	Open fireplaces (for heating)	An open fireplace is to be considered in the heating assessment if capable of supporting an open fire, even if no fuel is present: use fuel specified in SAP Table 12. Open fires in bedrooms are disregarded when identifying the heating systems (main and secondary) and heated habitable room count. They are counted in the number of open chimneys, if appropriate.	March 2010

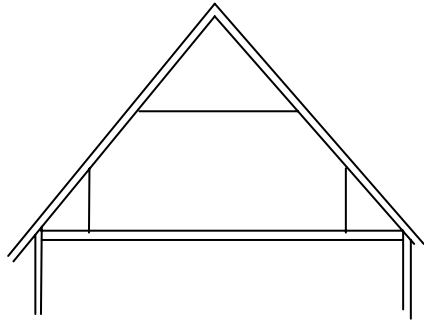
#	Topic	Conventions	Issue date
<b>Water heating</b>			
6.01	Water heating from community system	If community heating supplying DHW only – enter as gas multipoint and add addendum 3. If a gas boiler is then recommended (fuel switch) suppress it.	Sept 2009
6.02	Water heating by range cooker	If range cooker supplying DHW only – enter secondary heating as a closed room heater with boiler using the same fuel as the range cooker and add addendum 2. Any additional secondary heater is not included in the assessment – in that case record the presence of additional secondary heater in site notes with comment that it could not be included.	Sept 2009
<b>Lights</b>			
7.01	Low energy lights	LEDs are considered as LEL. Where there are 4 or more downlighters / ceiling lights divide the bulb count by 2. Include fixed under-cupboard kitchen strip lights.	Sept 2009
<b>Recommendations</b>			
8.01	Suppression of recommendations	Recommendations should be removed only if there is evidence, visual or documentary, showing that a specific recommendation is not appropriate. The EPC contains caveats to the effect that further guidance on specific recommendations should be sought from an appropriate professional organisation, for example heating engineers, building control officers, product manufacturers, trade associations, energy efficiency adviser, etc.. A listed building or a property in a conservation area is not sufficient grounds in its own right to suppress a recommendation. If a recommendation is removed this must be recorded in site note.	Sept 2009

#	Topic	Conventions	Issue date
8.02	Mains gas available	<p>Only if gas meter or gas burning appliance (e.g. gas cooker) is within the property. A closed-off gas pipe does not count.</p> <p>Where a boiler is present attached to a heating system (not in a box), and the mains gas meter has been removed for security reasons, enter a gas boiler as the main form of heating and indicate that mains gas is present.</p>	<p>Sept 2009</p> <p>amended March 2010</p>
<b>Miscellaneous</b>			
9.01	Open fireplace count (for ventilation)	<p>Include all open chimneys/fireplaces in the fireplace count (both downstairs and upstairs). The definition is a vertical duct with a flue diameter of at least 200 mm or its equivalent. The following are <u>not</u> counted as open fireplaces:</p> <ul style="list-style-type: none"> <li>• Any open flue that is less than 200 mm diameter</li> <li>• A permanently blocked up fireplace, even if fitted with an airbrick</li> <li>• Any heating appliance with controlled flow of air supply i.e. appliance has closing doors</li> <li>• A flexible gas flue liner sealed into the chimney (because the diameter is less than 200 mm)</li> <li>• A chimney fitted with a damper enabling the flue to be mechanically closed when not in use</li> </ul> <p>Temporary means of blocking a flue, e.g. cardboard, newspaper bungs and similar, are not a permanent means of controlling ventilation and therefore the chimney is counted as an open fireplace.</p> <p>Note that this relates only to the number of open fireplaces (it affects the ventilation rate assumed for the calculation). Other rules apply when considering the choice of main or secondary heating systems.</p>	March 2010
9.02	Documentary evidence	<p>Acceptable documentary evidence includes certificates, warranties, guarantees, building regulation submissions and official letters from the applicable Registered Social Landlord (RSL). The assessor must be confident, and able to demonstrate, that any documentation relates to the actual property being assessed and that there is no physical evidence to the contrary.</p>	March 2010

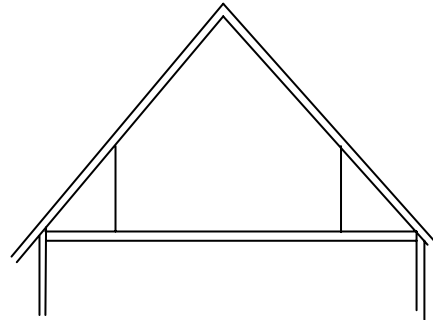
#	Topic	Conventions	Issue date
9.03	Lodgement of incorrect EPC	If you lodge an EPC in error and lodge a corrected EPC, inform your accreditation scheme so that the erroneous one can be marked "not for issue".	March 2010

**Illustrations of roof rooms (see convention 2.06)**

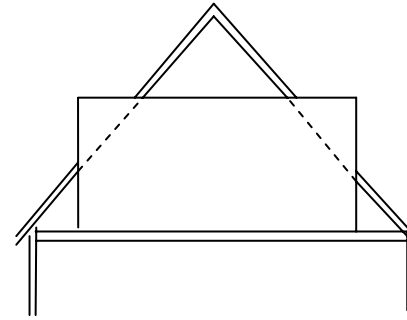
The following are all classified as roof rooms:



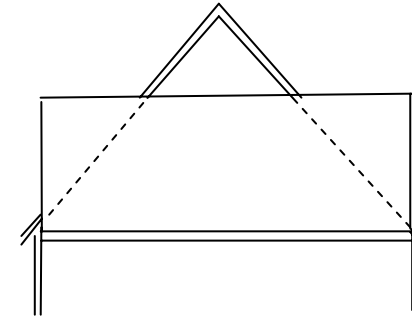
Basic roof room



Roof room with vaulted ceilings



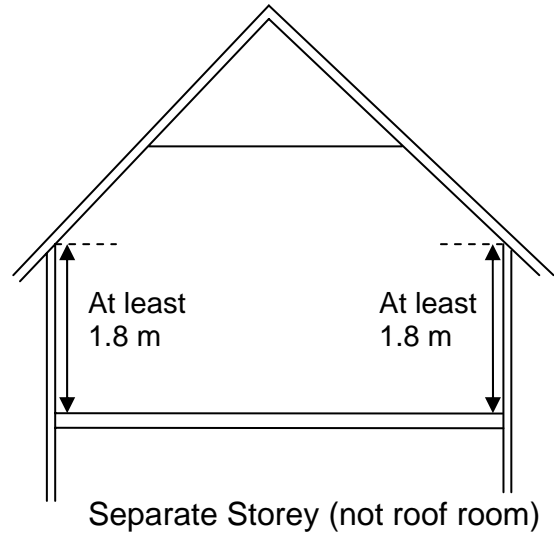
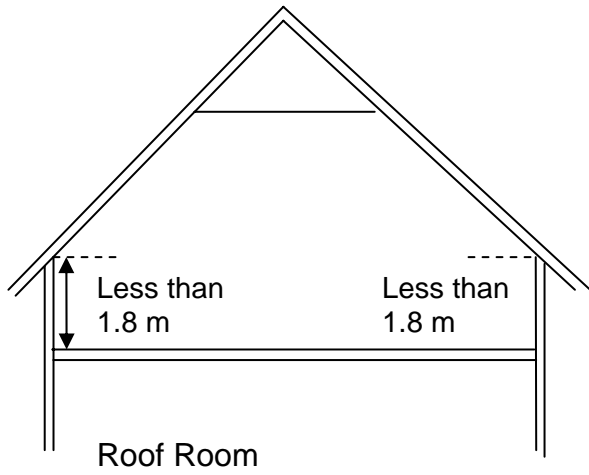
Roof room with dormer windows



Roof room with large dormer windows (chalet style)

Where there is a common wall it is:

- a roof room if the common wall is less than 1.8 m;
- a separate storey if greater or equal to 1.8 m:



## Revision history

September 2009	First issue Conventions: 1.01, 2.01, 2.02, 2.03, 2.04, 2.05, 2.09, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 5.01, 6.01, 6.02, 7.01, 8.01, 8.02
March 2010	Second issue Amended: 4.02, 8.02 Added: 1.02, 2.06, 2.07, 2.08, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 3.01, 3.02, 3.03, 3.04, 3.05, 4.07, 5.02, 9.01, 9.02, 9.03