

Appendix 1 – Documentary evidence

Where particular data values are brought to a SAP10 calculation, evidence is needed to confirm them. This appendix sets out appropriate forms of documentary evidence.

| # | Item | Conventions | Evidence |
|------|--|-------------|---|
| A2.1 | U-values for external elements | 5.01 | U-value calculation data sheet including construction layers (materials, thickness and thermal properties) and U-value corrections. |
| A2.2 | Window U-values and g-values | 5.04 | Certificate based on BFRC methodology, or the simulation report produced by the BFRC certified simulator. Statement from developer or equivalent person confirming the window properties as built, or that the windows meet minimum requirements of building regulations. |
| A2.3 | Party wall U-values | 5.03 | <u>Sealing</u> Specification on plans of location of edge sealing, including edge sealing detail, e.g. drawing, or named system, or written confirmation from builder that sealing has been done. <u>Filling and Sealing</u> Confirmation that MIMA Guidance http://mima.info/media/1222/mima-party-wall-bypass-guide_2018_lr.pdf has been adhered to, or written confirmation from builder that filling and sealing has been done. |
| A2.4 | Air permeability as built England and Wales | 1.02 | The test results for each dwelling accepted by Building Control, or a certificate from a person registered by an authorised air pressure testing scheme, for that dwelling. |

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|---------|--------------------------------|------------------|--|
| A2.4(a) | Scotland (SAP2012) | 1.02 (a) | <p>For a dwelling that was tested:</p> <ul style="list-style-type: none"> a copy of the test certificate and written confirmation from the applicant/agent that the verifier has accepted that test certificate; <p>For a dwelling that was not tested:</p> <ul style="list-style-type: none"> written confirmation from the applicant/agent that the verifier has accepted the design infiltration rate recorded on the supplied drawings and specification for all untested dwellings. In some cases, action following sample testing may result in the applicant/agent and verifier agreeing a revised design infiltration rate. Note that this option includes dwellings where a 'default' infiltration rate of 15 m³/h.m² @ 50 Pa is declared and accepted. <p>An assessor should not be required to contact the verifier directly in this matter. Responsibility to provide complete and correct information on the subject dwelling rests with the party engaging the assessor's services.</p> <p>Criteria for the competence of a person undertaking tests are set out in paragraph 5.4 of the BSD document 'Sound and Airtightness Testing' available at: http://www.gov.scot/Topics/Built-Environment/Building/Building-standards/techbooks/ast2015.</p> |
| A2.5 | Overall dwelling specification | | Confirmation in writing that the dwelling has been constructed and completed according to the specification provided to the assessor. |
| A2.6 | Thermal bridging | 5.06, 5.07, 5.08 | <p>Options include:</p> <ul style="list-style-type: none"> junction reference numbers and associated checklists for any ACDs or ECDs used; Ψ-values and checklists by professional bodies; manufacturers' Ψ-values and checklists where they have indicated that the calculations have been done by persons with suitable expertise and experience. written confirmation that individual Ψ-values have been calculated by someone with suitable expertise and experience; a copy of the detail or a reference to the detail number for a junction listed on the: https://www.bregroup.com/certifiedthermalproducts/podpage.jsp?id=3075 |
| A2.7 | Low temperature heating | 6.08 | Suitable evidence of low temperature design, e.g. Design, installation and commissioning certificate. |

Commented [DF2]: Should reflect 1.02a

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| A2.8 | Instantaneous waste water heat recovery | 7.05 | Requirement was deleted; covered under convention A2.5. |
| A2.9 | Items from the Product Characteristics Database – heating and hot water systems, heating controllers, mechanical ventilation, FGHRs, WWHRs and hybrid heat pumps | | Requirement was deleted; covered under convention A2.5. |
| A2.10 | Manufacturer's declared efficiency values for room heaters | | Requirement was deleted. |
| A2.11 | Cooling systems | | Manufacturer's declared value as specified in Table 10c of SAP 2012. |
| A2.12 | Solar water heating, PVs | 8.01 | Data sheet or equivalent giving manufacturer name and - for solar water heating: area, efficiency, and heat loss coefficient; - for PVs: the kWp rated power |
| A2.13 | Community heating | 6.05 | If community heating (heat network) is not included in the PCDB then: - evidence for plant configuration and efficiency values; - evidence for choice of distribution loss factor. |
| A2.14 | Summer overheating | 9.01 | cross-ventilation/ fire doors, window opening and security |
| A2.15 | Appendix Q | | Consult Appendix Q documentation for the item concerned. |
| The following items are additional to SAP10 | | | |
| A2.16 | Lighting (power and efficacy per bulb type) | n/a | "Written evidence from the builder of the count of each type of bulbs, proof of fittings used to state power (W) and efficacy (lm/w) for each light fitting type entered." |
| A2.17 | Showers (type & flow rates); | n/a | "Written evidence of manufacturer and model stating flow rate (l/min) of shower used is required where entering a flow rates. |
| A2.18 | Battery storage (capacity); | n/a | "Written evidence of manufacturer and model of battery unit used, and usable capacity (kWh) is required. If this cannot be obtained, then the battery store cannot be entered." |

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| A2.19 | PV Diverters | n/a | <i>"Written evidence of manufacturer and model of diverter system installed is required. If this cannot be obtained, then the diverter cannot be entered."</i> |
| A2.20 | Mech vent. duct level 1 and 2 options (SAP-10, Table 4h) | n/a | <p><i>"To claim for level 1 insulated ducts, written confirmation from the developer of the following is required;</i></p> <p><i>i. For supply (or extract, whichever is longer) duct lengths less than or equal to 2m, the duct system must be continuously insulated throughout to a minimum depth of 25mm with an insulant thermal conductivity of 0.04 W/m.K or less.</i></p> <p><i>ii. For supply (or extract, whichever is longer) duct lengths greater than 2m, the duct system must be continuously insulated throughout to a minimum depth of 50mm with an insulant thermal conductivity of 0.04 W/m.K or less."</i></p> <p><i>Should this not be obtainable then level 2 must be used."</i></p> |
| A2.21 | Community heating - distribution loss options | n/a | <p>a. <i>DLF in accordance with CIBSE Code of Practice - evidence from network designer and commissioning engineer needed;</i></p> <p>b. <i>DLF from system in PCDB – Written confirmation that dwelling is connected to heat network</i></p> |
| A2.22 | Community Heating/Heat Network - date of CHP? | n/a | <p>a. Pre 2015 CHP – <i>"The heat networks claiming these factors will have to demonstrate to SAP assessors and Building Control that the gas CHP units were installed or commissioned before 2015 as an existing system"</i></p> <p>b. New CHP – <i>"as above but for systems installed and commissioned on or after 15th June 2022</i></p> <p>c. 2015+ CHP – <i>"as above but for systems installed and commissioned between 01 January 2015 and 15th June 2022"</i></p> |

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| A2.23 | Community Heating/Heat Network – CHP Export type (SAP 10.2 Table 12f) | n/a | Written Confirmation from Network designer / commissioning engineer for the following: a. Export only (all power sent to grid) b. Flexible operation (only runs when marginal generating plant on the grid is high carbon) c. Standard (any other type of system) |
| A2.24 | Photographic evidences | n/a | In accordance with Appendix B of Approved Document L1(2021) for England and Approved Document L1 (2022) for Wales. Assessors shall receive digital photographic evidence from the builder (which in addition may include a report) to show the thermal continuity and quality of insulation of the built construction, air tightness and building services. Assessors should satisfy themselves that the photographic evidence provided confirms the above as far as carrying out a SAP Assessment. If photos are missing, SAP assessor needs to notify the developer in writing to seek guidance from Building Control. |
| A2.25 | Evidence of “Export capable meter” | n/a | Developer’s statement is considered as an evidence |