

## SAP 10 Version history

Date	Version name	Description and changes relative to previous version
24-07-2018	SAP 10.0	First published version of SAP 10 (based on SAP 2016, but with changes made following the SAP 2016 consultation).
08-11-2019	SAP 10.1	Version referred to in Future Homes Standard consultation.
20-08-2021	SAP 10.2	<ul style="list-style-type: none"> <li>• Results from low pressure pulse testing allowed for in the calculation of infiltration rate.</li> <li>• Appendix (Summer heat gain check) removed.</li> <li>• Efficiency of waste-water heat recovery made to vary with shower flow rate.</li> <li>• Option to add new heating control types via PCDB added.</li> <li>• Appendix C (heat networks) removed while changes consulted on.</li> <li>• Boiler efficiency controls/temperature adjustments updated (Tables D1, D2 and D3 and G1).</li> <li>• Appendix R (reference dwelling characteristics) updated to align with ADL1.</li> <li>• Fuel prices updated (Table 12).</li> </ul>
15-12-2021	SAP 10.2	<ul style="list-style-type: none"> <li>• New heat network procedures added via updated Appendix C, following government consultation.</li> </ul>
17-12-2021	SAP 10.2	<ul style="list-style-type: none"> <li>• Heat network fuel factors corrected.</li> </ul>
03-02-2022	SAP 10.2	<ul style="list-style-type: none"> <li>• Heat networks calculation corrected to properly account for the secondary fraction.</li> <li>• Second condition for top-up lighting requirement (equation L7) corrected (comparison was the wrong way round).</li> <li>• Open flues ventilation rate on the worksheet corrected from 35 back to 20 (this had been changed erroneously in the spec).</li> </ul>
17-03-2022	SAP 10.2	<ul style="list-style-type: none"> <li>• In Section 9.3.2, clarification on heat pump interpolation at different design flow temperatures provided.</li> <li>• In Section C3.1, a diagram was added showing input options for Heat networks in SAP 10.</li> <li>• In Section G1.2, FGHR energy saving with heat store (equation G2 and method) corrected (control factor was the wrong way round and the text implied multiplying savings by control factor twice).</li> <li>• In Table R1, the winter and summer boiler efficiencies now explicitly stated.</li> <li>• Title of Table 4d updated to include electric boilers and heat pumps.</li> </ul>
21-04-2022	SAP 10.2	<ul style="list-style-type: none"> <li>• Instruction added to section 2.3 requiring SAP software to limit the air permeability rate in naturally ventilated dwellings to not less than 3 m<sup>3</sup>/hr/m<sup>2</sup> at 50Pa, or the equivalent for a low-pressure test, when used for building regulations compliance assessments.</li> <li>• Clarified in Worksheet sections 12a, 12b, 13a and 13b the need to split into on/off peak fractions to before applying CO<sub>2</sub>/PE factors from Tables 12d and 12e.</li> </ul>

11/04/2023	SAP 10.2	<ul style="list-style-type: none"><li>• Existing heat networks may now be assessed against either the standard notional building (new option) or versus the same heat network.</li><li>• Correction of heat networks fuel prices in Table 12.</li><li>• New distribution loss factor for two dwellings sharing a single heating system in Table 12c.</li></ul>
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