

Airex Floorvent SAP Appendix Q guide

What is SAP Appendix Q?

From the Building Energy Performance Assessment support website:

“Appendix Q of SAP provides a means whereby validated individual branded product performance information can be accessed and used as an adjunct to the SAP calculation. A product’s performance information is determined by testing against a specification that has been agreed by the Department for Business, Energy & Industrial Strategy’s (BEIS) NCM contractor, the relevant manufacturer(s) and industry sector representatives.”

“Product data will be used in preference to any default value to determine the energy performance of the dwelling, providing the product is installed in the dwelling being assessed and can be recognised and identified by the Dwelling Assessor.”

How to model Airex Floorvent in SAP Appendix Q

To model the impact of Airex Floorvent you will need:

- RdSAP modelling software
- The “Appendix Q Calculation Tool - Smart Air Brick” found on the [Building Energy Performance Assessment support website](#)

Airex has produced a [video guide](#) showing the step-by-step process. This is also outlined below:

1. Download the worksheet for an otherwise completed RdSAP assessment
2. Download the “Appendix Q Calculation Tool - Smart Air Brick”
3. Record the value provided in box 39 of the RdSAP worksheet
4. Enter this in “Appendix Q Calculation Tool - Smart Air Brick” in cell B9 “Current HTC (Box 39)”
5. Record the value provided in boxes 211, 213, 215 and 219 of the RdSAP worksheet¹ along with the associated heating fuels.
6. Within the RdSAP modelling software reduce the u-value of the floor to a chosen value e.g to 0.2
7. Download the updated worksheet
8. Compare the value provided in box 39 of the RdSAP worksheet against the “Target HTC” in cell B10 of the “Appendix Q Calculation Tool - Smart Air Brick”
9. If the value in box 39 is within 0.5 W/K of the “Target HTC” move to step 12 otherwise continue to step 10
10. Increase or decrease the u-value of the floor as required to try and reach the target value (decreasing the u-value if the HTC is higher than the target and decreasing it is higher)
11. Repeat step 11 until the value in box 39 is within 0.5 W/K of the “Target HTC”
12. Go to the “Special features” section of your RdSAP software and add a new “Energy Saving Feature”

¹ In most cases, not all of these boxes are shown, record all those that are.

13. Add the “Appendix Q savings” provided by the Appendix Q Calculation Tool - Smart Air Brick” to the “Energy Saved/Generated” field in the RdSAP software and record the “Energy Used Fuel”
14. Reset the u-value of the floor to the original value
15. The process is completed and the impact of Floorvent is now reflected in the RdSAP assessment

Frequently asked questions

I use different RdSAP software, will this process work?

Yes, whilst different tools may look different it is always possible to account for Airex’s impact. The worksheets produced may be formatted differently but the box references in the worksheet are consistent across all platforms.

I have reduced the u-value of the floor to 0 and the HTC is still greater than the target value, what should I do?

In this case, you should reduce the u-value of the walls until you meet the target value. You should reset this value once the calculations are complete and Floorvent has been added as a special feature.

I can’t get the HTC value to exactly meet the target value, what should I do?

Having the HTC exactly equal to the target given by the Appendix Q Calculation Tool is unnecessary. Instead, it is sufficient to be within 0.5 W/K.

When I try to include the Floorvent system there is no impact on the SAP score, am I doing something wrong?

The values gathered from the RdSAP worksheet contain both monthly and total values, ensuring you are using the annual total as opposed to a single month.