

**SAP Appendix Q Testing Results**  
**Central mechanical supply and exhaust ventilation system**  
**packages with heat recovery used in a single dwelling**

|                                                         |                  |                                                                       |
|---------------------------------------------------------|------------------|-----------------------------------------------------------------------|
| <b>Brand Name</b>                                       |                  | ProAir                                                                |
| <b>Model</b>                                            |                  | ProAir PA300                                                          |
| <b>Model Qualifier (if applicable)</b>                  |                  |                                                                       |
| <b>Current Manufacturer and Contact Details</b>         | <b>Name</b>      | ProAir Systems                                                        |
|                                                         | <b>Address</b>   | Tuam Business Park<br>Weir Road<br>Tuam<br>Co Galway<br>Ireland       |
|                                                         | <b>Telephone</b> |                                                                       |
|                                                         | <b>Website</b>   | <a href="http://www.proair.ie">www.proair.ie</a>                      |
| <b>Original Manufacturer (if different)</b>             |                  |                                                                       |
| <b>First Year of Manufacture</b>                        |                  | 2007                                                                  |
| <b>Last Year of Manufacture</b>                         |                  |                                                                       |
| <b>Testing Body</b>                                     |                  | BRE                                                                   |
| <b>Date of test</b>                                     |                  | 21/07/2008                                                            |
| <b>Serial Number of Product Tested</b>                  |                  | PA3001683WTFC/07                                                      |
| <b>MVHR to outside grille duct types and size</b>       |                  | 150 & 125 mm diameter rigid plastic and 200 mm diameter rigid plastic |
| <b>Duct types and sizes used for supply and exhaust</b> |                  | 150 & 125 mm diameter rigid plastic and 200 mm diameter rigid plastic |

**Results of leakage tests**

**Table Q1**

|                 |             |
|-----------------|-------------|
| <b>Internal</b> | <b>Pass</b> |
| <b>External</b> | <b>Pass</b> |

**Results for SAP calculations (at minimum flow rate condition)**

This product has only been tested with rigid ductwork and the data are not applicable for SAP calculations if installed with flexible ductwork.

**Table Q2 – Systems with rigid ductwork only**

| Exhaust terminal configuration   | Fan speed setting | Specific fan power (W/l/s) | Heat exchange efficiency (%) | Energy Saving Trust Best Practice Performance Compliant |
|----------------------------------|-------------------|----------------------------|------------------------------|---------------------------------------------------------|
| Kitchen + 1 additional wet room  | 100% variable     | <b>1.15</b>                | <b>85</b>                    | No                                                      |
| Kitchen + 2 additional wet rooms | 100% variable     | <b>0.96</b>                | <b>84</b>                    | No                                                      |
| Kitchen + 3 additional wet rooms | 100% variable     | <b>0.99</b>                | <b>84</b>                    | No                                                      |
| Kitchen + 4 additional wet rooms | 100% variable     | <b>1.17</b>                | <b>83</b>                    | No                                                      |
| Kitchen + 5 additional wet rooms | 100% variable     | <b>1.36</b>                | <b>83</b>                    | No                                                      |

These figures are entered into either:

- (a) In the case of SAP software amended to SAP 2005 version 9.81 allowing direct entry of MVHR data, the SAP software, or
- (b) In the case of SAP software amended to SAP 2005 version 9.81 not allowing direct entry of MVHR data, the SAP Q MVHR Calculation Spreadsheet v9.81 and the results from the spreadsheet into the Special Features part of the SAP 9.81 software, or
- (c) In the case of SAP software to SAP 2005 version 9.80 , the SAP Q MVHR Calculation Spreadsheet v9.80 and the results from the spreadsheet into the Special Features part of the SAP 9.80 software. They must **NOT** be entered directly into SAP 2005 version 9.80 software

**Table Q3** – Systems with **flexible** ductwork only

| Exhaust terminal configuration  | Fan speed setting | Specific fan power (W/l/s) | Heat exchange efficiency (%) | Energy Saving Trust Best Practice Performance Compliant |
|---------------------------------|-------------------|----------------------------|------------------------------|---------------------------------------------------------|
| Kitchen + 1 additional wet room | N/A               | <b>N/A</b>                 | <b>N/A</b>                   | N/A                                                     |

These figures are entered into either:

- (a) In the case of SAP software amended to SAP 2005 version 9.81 allowing direct entry of MVHR data, the SAP software, or
- (b) In the case of SAP software amended to SAP 2005 version 9.81 not allowing direct entry of MVHR data, the SAP Q MVHR Calculation Spreadsheet v9.81 and the results from the spreadsheet into the Special Features part of the SAP 9.81 software, or
- (c) In the case of SAP software to SAP 2005 version 9.80 , the SAP Q MVHR Calculation Spreadsheet v9.80 and the results from the spreadsheet into the Special Features part of the SAP 9.80 software. They must **NOT** be entered directly into SAP 2005 version 9.80 software

**Results for Approved Document F (at maximum flow rate condition)**

**Table Q4**

| Exhaust terminal configuration   | Fan speed setting | Total exhaust flow rate (l/s) | Total supply flow rate (l/s) |
|----------------------------------|-------------------|-------------------------------|------------------------------|
| Kitchen + 1 additional wet room  | 100% variable     | 17.7                          | 17.7                         |
| Kitchen + 2 additional wet rooms | 100% variable     | 21.0                          | 21.0                         |
| Kitchen + 3 additional wet rooms | 100% variable     | 27.0                          | 27.0                         |
| Kitchen + 4 additional wet rooms | 100% variable     | 33.0                          | 33.0                         |
| Kitchen + 5 additional wet rooms | 100% variable     | 39.0                          | 39.0                         |

**Comments**

Only figures from Table Q2 or Table Q3, not both, should be used with the SAP Q Calculation Spreadsheet for this technology type.

Table Q4 results are only applicable for Approved Document F requirements.