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

Brand Name		Titon
Model		HRV1 Q Plus
Model Qualifier (if applicable)		
Current Manufacturer and Contact Details	**Name**	Titon
	Address	International House Peartree Road Starway Colchester Essex CO3 0JL
	Telephone	01206 713800
	Website	www.titon.co.uk
Original Manufacturer (if different)		
First Year of Manufacture		2008
Last Year of Manufacture		
Testing Body		BRE
Date of test		20/10/2007
Serial Number of Product Tested		0001/0908/2222
MVHR to outside grille duct types and size		150 & 125mm diameter rigid plastic & 200mm rectangular rigid plastic
Duct types and sizes used for supply and exhaust		150 & 125mm diameter rigid plastic & 200mm rectangular rigid plastic

Results of leakage tests

Table Q1

Internal	**Pass**
External	**Pass**

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	**0.70**	**91**	Yes
Kitchen + 2 additional wet rooms	100% variable	**0.70**	**89**	Yes
Kitchen + 3 additional wet rooms	100% variable	**0.72**	**89**	Yes
Kitchen + 4 additional wet rooms	100% variable	**0.90**	**88**	Yes
Kitchen + 5 additional wet rooms	100% variable	**0.99**	**87**	Yes

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	**N/A**	**N/A**	N/A

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	15.0	15.0
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.