

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

Brand Name		MDT Solutions
Model		MTD-ERV 350
Model Qualifier (if applicable)		
Current Manufacturer and Contact Details	Name	MTD Solutions Ltd
	Address	8 Burgage House Blessington Co. Wicklow Ireland
	Telephone	+353 45 900 590
	Website	www.mtd-solutions.com
Original Manufacturer (if different)		
First Year of Manufacture		2007
Last Year of Manufacture		
Testing Body		BRE
Date of test		11/12/2007
Serial Number of Product Tested		971230110
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 Appendix Q at minimum flow rate condition

This product has only been tested with rigid ductwork and it is not applicable for SAP Appendix Q 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	Supply - 22 Extract -21	0.75	86	Yes
Kitchen + 2 additional wet rooms	Supply - 28 Extract -27	0.68	84	No
Kitchen + 3 additional wet rooms	Supply - 33 Extract -32	0.67	84	No
Kitchen + 4 additional wet rooms	Supply - 39 Extract -37	0.71	84	No
Kitchen + 5 additional wet rooms	Supply - 44 Extract -42	0.78	83	No
Kitchen + 6 additional wet rooms	Supply -49 Extract -47	0.88	82	No
Kitchen + 7 additional wet rooms	Supply - 55 Extract -53	0.99	82	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	N/A	N/A	N/A
Kitchen + .. additional wet rooms				

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	Supply - 22 Extract -21	15.0	15.0
Kitchen + 2 additional wet rooms	Supply - 28 Extract -27	21.0	21.0
Kitchen + 3 additional wet rooms	Supply - 33 Extract -32	27.0	27.0
Kitchen + 4 additional wet rooms	Supply - 39 Extract -37	33.0	33.0
Kitchen + 5 additional wet rooms	Supply – 44 Extract -42	39.0	39.0
Kitchen + 6 additional wet rooms	Supply –49 Extract -47	45.0	45.0
Kitchen + 7 additional wet rooms	Supply - 55 Extract -53	51.0	51.0

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.