

Certificate

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This is to certify that

BSRIA Limited

has tested a sample of the product described below in accordance with the test methods contained within prEN 1886:2006 “Ventilation for buildings-Air handling units-Mechanical performance” and CIBSE A design data guidelines and have determined the item met the requirements of the standard for those aspects shown. For further details see page 2 of this certificate

Manufacturer/Agent VES Andover Ltd
Eagle Close
Chandlers Ford Industrial Estate
Chandlers Ford
Eastleigh
Hampshire
S053 4NF

Product Air Handling Unit ‘Model Box’

Date of test 29 November 2007

Test Engineer Tom Garrigan

Expiry date 29 November 2013

Quality Approved PHIL STONARD
Laboratory Manager

PRODUCT DETAILS

The Air Handling Unit 'model box' tested had dimensions of 2505mm by 1165mm by 1042 mm. The unit was manufactured and supplied by VES Andover Ltd. The frame of the unit was constructed from extruded aluminium and held together with knock-in joints, while the panels were steel sheets with mineral wool sandwiched between them. The unit was supplied in two halves with a fan mounting plate and filter mounting plate, which had a bag filter installed. These were bolted together with a foam gasket joint. The frame of one half was sprayed with an experimental grey nylon coating between 300-400 microns thick, designed to reduce condensation. The construction included one access door and one removable access panel.

RESULTS

The AHU casing attained a class rating of D1 (deflection <4mm) during the deflection test.

The AHU remained structurally intact during the strength test at a positive and negative downstream pressure of 2500Pa with no permanent deformation.

The AHU attained a class rating of L3 ($< 1.90 \text{ l/s/m}^2$) during the casing air leakage test at 700Pa positive pressure downstream and 400Pa negative pressure downstream.

The filter bypass leakage was suitable for a class of filter of G1 to F7 at 400Pa negative and positive pressure ($< 2\%$ of nominal volume flow rate, based on a face velocity of 2.5 m/s).

A filter class F7 was attained at 400Pa positive and negative pressure, upstream and downstream.

The AHU attained a class rating of T5 during the thermal transmittance test and TB1 during the thermal bridging test.

Full details of results and test methods can be found within BSRIA report 51479/1 dated December 2007.