



*A practical
guide to*

**Heating and
Ventilating
Contractors'
Association**

Ductwork Leakage Testing



DW/143

A practical guide to –

Ductwork Leakage Testing

*Based on the requirements of
DW/144 specification for
sheet metal ductwork.*

First published	1983
Second edition (reprinted)	1986
Third edition (reprinted)	1991
Fourth edition (reprinted)	1994
Fifth edition (revised)	2000

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ISBN: 0-903783-30-4

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ACKNOWLEDGEMENTS

The HVCA records its appreciation and thanks to the persons and organisations who have freely contributed to this work, and in particular to the members of the Drafting Panel.

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FINANCIAL CAUTION

It is essential to realise that except where it is mandatory in Class C ductwork in DW/144 this document is not an endorsement of the routine testing of ducts but purely a guide to outline the procedures, necessary for testing ducts for conformity with air leakage limits.

When proper methods of assembly and sealing of ducts are used a visual inspection will suffice for the verification of a well engineered construction.

WHERE NOT MANDATORY, DUCT LEAKAGE TESTING IS GENERALLY AN UNJUSTIFIED SUBSTANTIAL EXPENSE.

PREFACE



Edgar Poppleton *Chairman*, Technical Sub-Committee Ductwork Group, 2000

Ductwork Specification DW/142, published by the HVCA in 1982, provided for the first time in a long series of such publications for leakage limits over the whole range of air pressures covered by the specification and (where required) a test procedure to establish conformity.

Although leakage testing of high-pressure ductwork is still mandatory in DW/144 (as was the case in previous ductwork specifications issued by HVCA) the leakage testing of ductwork designed to operate at low and medium pressures is required only where so specified in individual job specifications.

With the retention of three pressure classifications in DW/144 it is hoped that the designer, having control over performance standards, will find leakage testing an unnecessary contract expense with regard to low and medium pressure ductwork see note Financial Caution (page 2).

Ductwork contractors faced with a job calling for leakage testing should take this requirement very seriously and satisfy themselves as the job progresses that the required leakage rate or rates are within the limits set by the designer or the client. The cost of making good an installation that has been found on completion to have failed in this respect can be very expensive.

DW/144 specifies leakage limits for the ductwork alone, because the ductwork contractor has no control over the leakage characteristics of the various components which go to make up the whole of the air distribution system. Where a job specification calls for a leakage limit for the whole system, it will be for the designer or client to ensure that the leakage rates of the components are also within the required limits.

Edgar Poppleton *Chairman*,
Technical Sub-Committee Ductwork Group, 2000