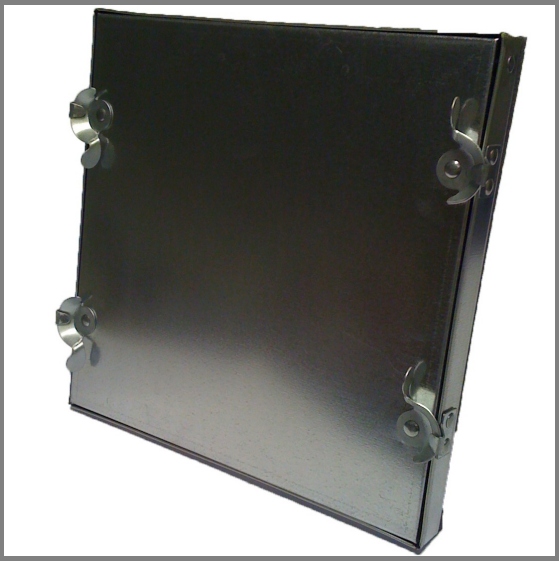
Manufacturer & Stockist of

Heating, Ventilation & Air Movement Equipment

Units 2 & 3
Bull Ring Trading Estate,
Green Street, Digbeth,
Birmingham, B12 0NB.
Tel: 0121 766 8126
Fax: 0121 766 7239
www.ajs-vent.co.uk

STANDARD ACCESS DOOR RANGE

STANDARD CAM OPERATED INSULATED ACCESS DOOR



Description:

The AJS range of galvanised mild steel standard (Cam Operated) access doors, manufactured by ourselves in the UK, offers a quick and simple solution to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

Complete with a fully removable double skinned panel and radius knock over tabbed sub-frame.

Certification

- BSRIA Quality approved pressure tested.

Full Features:

- Easy to install
- Double skinned construction.
- Manufactured from 0.8mm galvanised mild steel (as standard).
- Encapsulating 25mm 60 kg/m2 Rockwool Insulation.
- 6mm closed cell polyethylene gasket adhered to both inner & outer sub-frame, reducing the risk of air leakage.
- A positive seal is achieved via 1.2mm progressive action cam lock fasteners.
- Radius knock-over tabs, reducing the risk of personal injury when handling.

Door Depth

- 25mm Deep.
- 50mm Deep.

Fire Retardant Options

- Encapsulating 25mm 128kg Ceramic Blanket Insulation.
- 6mm (FMVSS 302) PVC Gasket adhered to both inner & outer sub-frame.

Material Options

- Galvanised Mild Steel.
- 304 Stainless Steel.
- 316 Stainless Steel.

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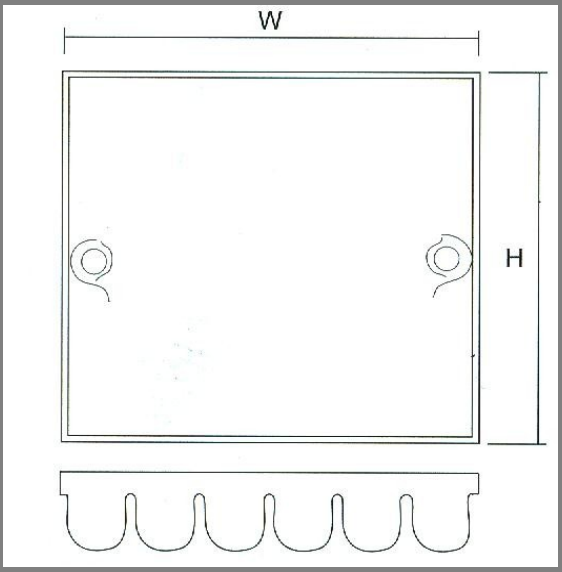
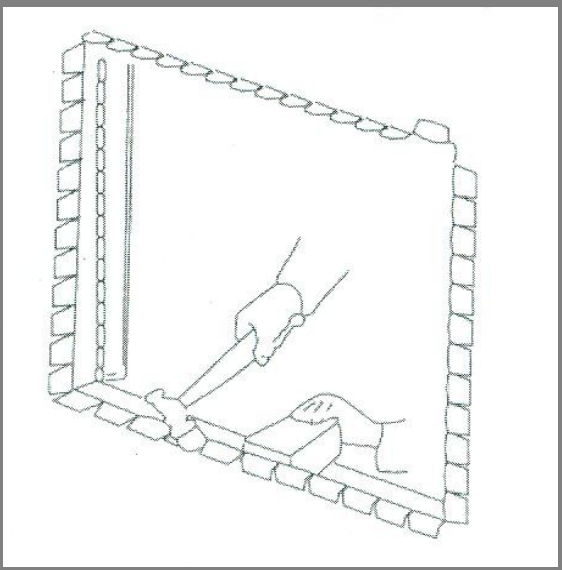
ACCESS DOOR DIMENSIONS & INSTALLATION METHOD

SQUARE & RECTANGULAR ACCESS DOORS



INSTALLATION METHOD

1. Cut opening in duct to dimensions shown.
2. Offer access panel sub-frame into opening and knock over tab edges while supporting sub-frame firmly onto duct.



STANDARD SIZES HELD IN STOCK	
DOOR & FRAME	REQUIRED DUCT
OVERALL SIZE	OPENING SIZE
W (mm) X H (mm)	W (mm) X H (mm)
100 X 100	60 X 60
150 X 100	110 X 60
150 X 150	110 X 110
200 X 100	160 X 60
200 X 150	160 X 110
200 X 200	160 X 160
250 X 150	210 X 110
250 X 200	210 X 160
250 X 250	210 X 210
300 X 150	260 X 110
300 X 200	260 X 160
300 X 300	260 X 260
400 X 200	360 X 160
400 X 300	360 X 260
400 X 400	360 X 360
450 X 300	410 X 260
450 X 450	410 X 410
500 X 500	460 X 460
600 X 300	560 X 260
600 X 400	560 X 360
600 X 450	560 X 410
600 X 600	560 X 560
ALL SIZES ARE APPROXIMATE	

PRESSURE TEST ON DUCT ACCESS DOOR

Carried out for & on the behalf of:

KK Manufacturing & Distribution
a division of AJ Services - Established 1986
Unit 7 / 78 Hutton Road
Handsworth
Birmingham
B20 3RD

Test carried out by:

P N Stonard & A L Fricker

1. INTRODUCTION

This report concerns pressure tests carried out on a duct access door and frame assembly. The sample was manufactured by KK Manufacturing, who also commissioned the test work carried out in the BSRIA laboratories during the period 3 February to 5 February 1992

2. OBJECTIVE

To determine the leakage rate from the door and frame assembly.

3. ITEMS SUPPLIED FOR TEST

The items supplied consisted of an access door and frame of overall dimensions 305mm x 305mm. This was mounted on a galvanised steel plenum 600mm x 600mm x 600mm. The whole assembly had been sealed to the plenum using a mastic sealant and the door frame using a foam strip arrangement.

4. TEST METHOD

Four sets of tests were carried out. Pressures was applied to the plenum in stages up to maximums of 2500 Pa positive and 750 Pa negative.

These were limits stated in DW142 HVCA specification for high pressure Class ‘D’ ductwork.

Tests were conducted with the plenum assembly “as supplied” to give gross leakage rate and with the access door assembly blanked off to give a net leakage rate. The difference between the two gave the leakage through the door assembly. Air was supplied and extracted via a centrifugal fan and venturi arrangement . Pressures being measured using digital micromanometers.

5. RESULTS

Gross Leakage (system, plenum, door assembly)

PLENUM PRESSURE Pa	VENTURI DIFFERENTIAL PRESSURE Pa	LEAKAGE RATE 1/s
530	1.2	Less than 0.05
970	3.6	0.110
1500	9.2	0.175
1990	15.6	0.232
2480	25.6	0.302
-470	1.9	<0.05
-520	2.6	<0.05
-770	4.2	0.117

PLENUM PRESSURE Pa	VENTURI DIFFERENTIAL PRESSURE Pa	LEAKAGE RATE 1/s
440	1.3	<0.05
650	2.5	<0.05
1050	4.7	0.128
1600	9.9	0.182
1900	15.1	0.230
2490	25.0	0.300
-490	2.1	<0.05
-740	4.0	0.115
-760	4.3	0.118

6. CONCLUSIONS

The leakage of the access door and frame was less than 0.05 1/s at all test pressures

The test pressures did not cause permanent deformation.

BSRIA Member

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