

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

# TABBED ACCESS DOOR RANGE



### PRODUCT RANGE

- Insulated double skinned tabbed access door.
- Fire Retardant double skinned tabbed access door.

#### **Available Options**

- 25mm Deep.
- 50mm Deep.
- Factory fitted safety retaining chain.
- Factory fitted hinge.

#### **Material Options**

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

# Description / Full Features:

Manufactured in the U.K. The AJS range of access doors have been designed for both strength and to gain easy and safe access to all in-duct equipment for inspection, maintenance and duct cleaning purposes.

Our range offers suitability for low to medium and high pressure systems for use on rectangular ductwork.

#### Certification

BSRIA Quality approved pressure tested.

# AJS are proud to be associated with:









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www.ais-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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# CHAINED ACCESS DOOR RANGE

### CAM OPERATED INSULATED CHAINED ACCESS DOOR



### Description:

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

As with our standard access door, a fully removable, double skinned panel and radius knock over tabbed sub-frame, with the additional feature of a factory fitted safety retaining chain attached to both the door panel and sub frame, to assist in the prevention of injury and damage from the panel falling/being dropped whilst Removing.

#### Certification

• BSRIA Approved Quality Pressure Tested.



## Full Features:

- Easy to install.
- Double skinned construction.
   Manufactured from 0.8mm galvanised mild steel (as stand
- 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.
- Factory fitted safety retaining chain (welded oval link, bright zinc plated mild steel) attached to both door panel & sub-frame.

#### **Door Depth Options**

- 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.

Every effort is made to ensure the information in AJS literature is correct, however no warranty is given in this respect and the company shall not be liable as a result of any inaccuracy. The company has a policy of continuous product development and reserves the right to alter, at any time, specification without prior notice



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# HINGED ACCESS DOOR RANGE

### **CAM OPERATED INSULATED HINGED ACCESS DOOR**



### Description:

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

As with our standard access door, a removable double skinned panel and radius knock over tabbed sub-frame with the feature of a factory fitted full length piano hinge, attached to both the door panel and sub frame to assist in the additional prevention of injury and damage from the panel falling/being dropped whilst removing.

#### Certification

BSRIA Approved Quality 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.
- Factory fitted full length piano hinge (1.5" open, bright zinc plated mild steel) attached to both door panel & sub-frame.

#### **Door Depth Options**

- 25mm Deep.
- 50mm Deep.

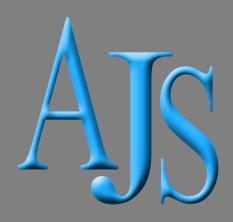
#### **Fire Retardant Options**

- 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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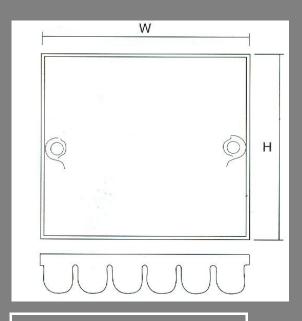


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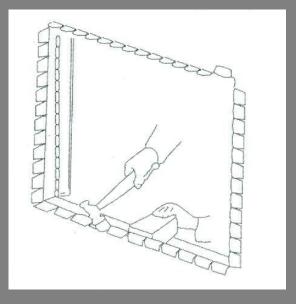
ACCESS DOOR
DIMENSIONS
&
INSTALLATION
METHOD

## **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. <u>INTRODUCTION</u>

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. <u>TEST METHOD</u>

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)

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	VENTURI	
PLENUM PRESSURE	DIFFERENTIAL PRESSURE	LEAKAGE RATE
Ра	Pa	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

	VENTURI	
PLENUM PRESSURE	DIFFERENTIAL PRESSURE	LEAKAGE RATE
Pa	Pa	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. <u>CONCLUSIONS</u>

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.



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