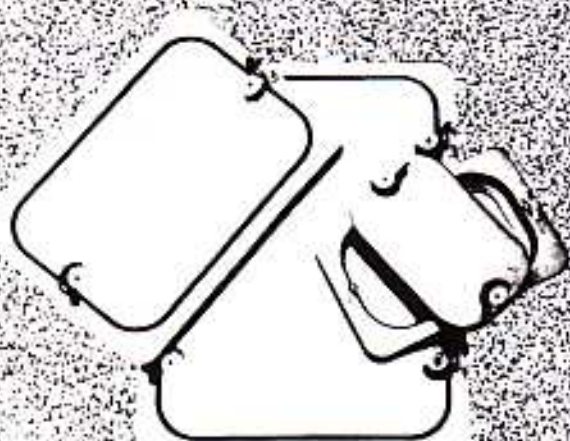
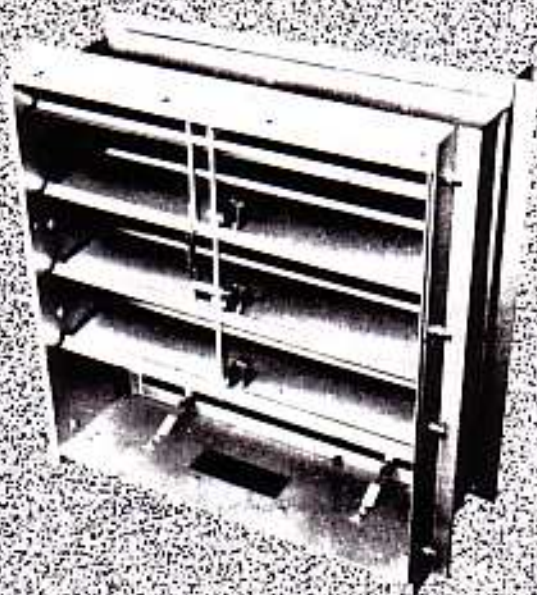
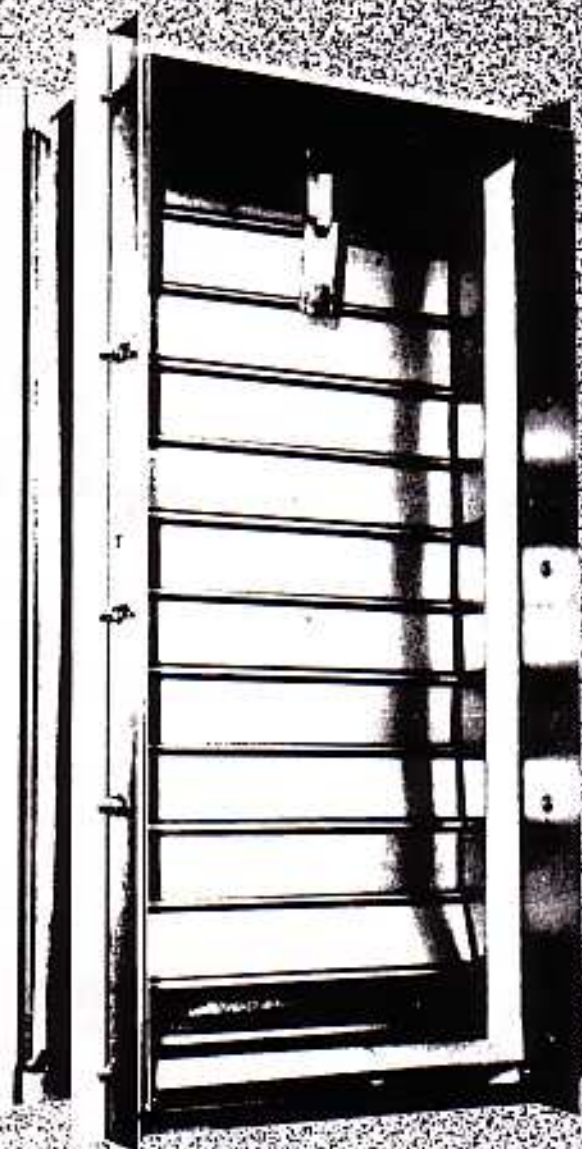


abc fire dampers 4 hour rated

FIRE DAMPERS AND ACCESSORIES



DISTRIBUTED BY:



I & M Industries

2 Joel Court, Moorabbin, Victoria, Australia 3189

P.O. Box 1165, Moorabbin, Victoria 3189

Telephone 9555 6955 Fax 9555 6465

A.B.C. DUCT COMPONENTRY PTY. LTD.

A.C.N. 005 137 575

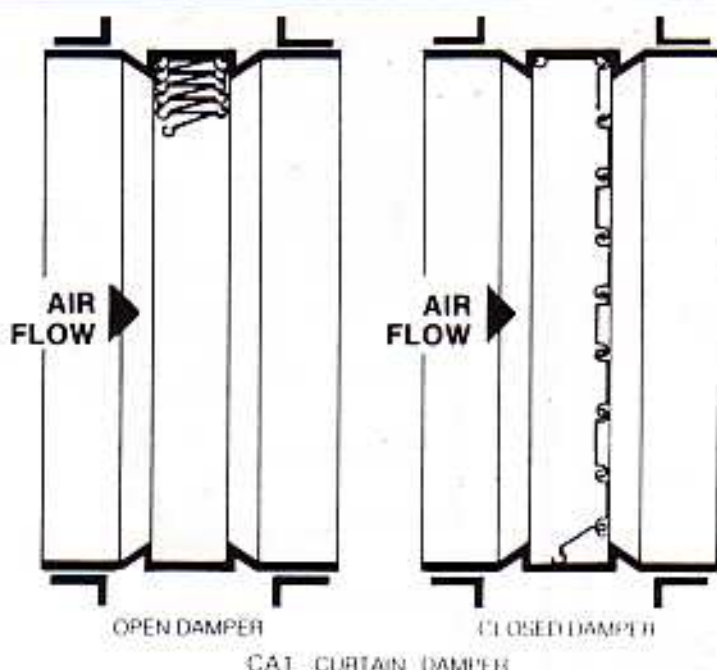
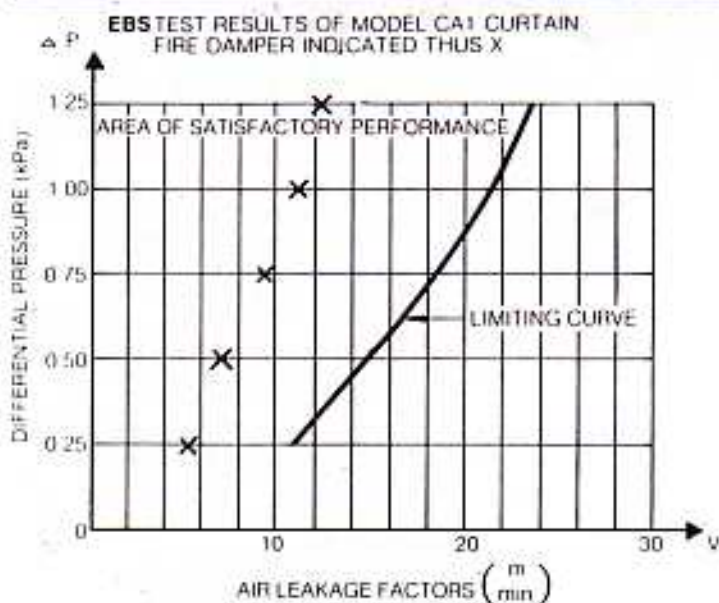
TRADING AS: I & M INDUSTRIES

1 - 3/99

All specifications are subject to alterations without notice

abc fire dampers 4 hour rated

PRODUCT RANGE AND PERFORMANCE



MODEL CA1 CURTAIN DAMPER

The advantage of a CA1 Curtain Damper is the simplicity of its design. It incorporates a unique interlocking blade system giving high resistance to fire penetration and distortion. The curtain of blades rides in an integrally formed sleeve / jamb section designed to be narrow in profile, constructionally strong whilst being light in weight. Resetting can be achieved from either side.

MODEL PM1 MULTI-BLADE RECTANGULAR DAMPER

The Multi-Blade Rectangular Damper has parallel acting blades connected by a linkage bar. This product features a special non return locking catch that can be released from either side.

MODEL PS1 SINGLE BLADE RECTANGULAR DAMPER

This Damper has similar hardware and non return catch as PM1

MODEL RS1 SINGLE BLADE ROUND DAMPER

SUMMARY OF TESTS BY THE EXPERIMENTAL BUILDING STATION NORTH RYDE N.S.W. AUSTRALIA

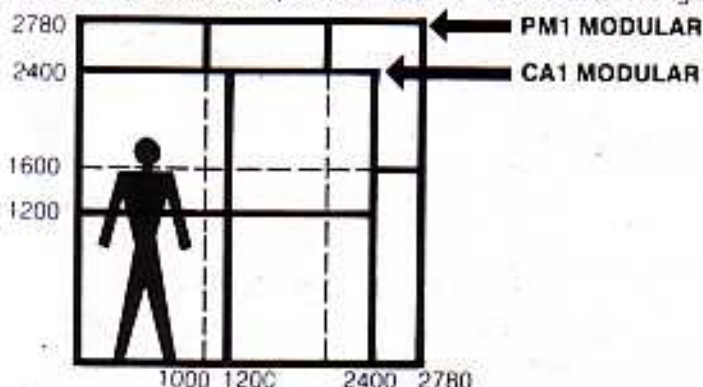
| MODEL | DUST TEST (TO AS1682) | LEAK TEST (TO AS1682) | FIRE TEST (TO AS1530) | MAXIMUM DAMPER SIZES TESTED | |
|-------|--------------------------|--------------------------|--------------------------|-----------------------------|------------------------|
| | | | | SINGLE MODULE W X H | MULTI-MODULAR W X H |
| CA1 | Passed | Passed | Passed 4 hr | 1200 x 1200 | 2400 x 2400 |
| PM1 | Passed | Passed | Passed 4 hr | 1000 x 1600 | 2780 x 2780 |
| PS1 | Passed | Passed | Passed 4 hr | 850 x 500 | - |
| RS1 | Passed | Passed | Passed 4 hr | 750 Dia | - |

INSTALLATION ECONOMY All dampers are supplied as "Standard" with slotted mounting angles prebolted through the square holes in the damper casing. This simplifies the compliance to the installation code - AS1668 and enables "one handed" tightening of the bolts and dramatically reduces installation time.

RANGE OF PRODUCTS AND SIZES The above table of successfully tested Dampers illustrates, not only a wide choice of Damper Types, but also shows little restriction in dimension due to the extreme size of the "AS1682" approved products.

Note: We do not claim "approval" to the code AS1682 where single modules are joined to satisfy a dimension larger than the actual tested Multi modular maximum dimension as shown above. — Samples of these actually tested dampers are available for inspection.

FUSIBLE LINKS All Dampers are fitted with fusible links. Frangible Bulb, Electro Thermal or standard type available.



DISTRIBUTED BY:



I & M Industries

2 Joel Court, Moorabbin, Victoria, Australia 3189

P.O. Box 1165, Moorabbin, Victoria 3189

Telephone 9555 6955 Fax 9555 6465

A.B.C. DUCT COMPONENTRY PTY. LTD.

A.C.N. 005 137 575

TRADING AS: I & M INDUSTRIES

1 - 3/99

All specifications are subject to alterations without notice

abc fire dampers 4 hour rated

MOUNTING STYLES AND INSTALLATION INSTRUCTIONS

SINGLE MODULE DAMPERS

NOT TO SCALE

■ DENOTES LOCATION OF FUSIBLE LINK.

| MAX TESTED SIZE MM | STYLE 'A' O.D. = NOMINAL +5 MM SLEEVE DEPTH = WALL + 160 MM | STYLE 'B' I.D. = NOMINAL SLEEVE DEPTH = WALL + 80 MM | STYLE 'C' I.D. = NOMINAL SLEEVE DEPTH = WALL + 80 MM |
|-----------------------|---|--|--|
| 1200 W x 1200 H | CA1 CURTAIN BLADED | CA1 | CA1 |
| 1000 W x 1600 H | PM1 MULTI BLADED | PM1 | PM1 <p>IF OUTRIGGER IS REQUIRED FIX WITH NYLON BOLTS</p> |
| 850 W x 500 H | PS1 SINGLE BLADED | PS1 | PS1 |
| 750 DIA | RS1 SINGLE BLADED - ROUND MIN WALL = 80 MM | | |

MULTI MODULAR UNITS DIMENSIONS ALLOW FOR MODULAR JOINING BOLTS - MIN. SLEEVE DEPTH AS ABOVE

| MAX TESTED SIZE MM | STYLE 'A' O.D. = NOMINAL +5 MM SLEEVE DEPTH = WALL + 160 MM | STYLE 'B' I.D. = NOMINAL SLEEVE DEPTH = WALL + 80 MM | STYLE 'C' I.D. = NOMINAL SLEEVE DEPTH = WALL + 80 MM |
|-----------------------|---|--|--|
| 2400 W x 2400 H | CA1 MIN WALL = 100 MM | CA1 MIN WALL = GRILLE + 180 MM | CA1 MIN WALL = GRILLE + 130 MM |
| 2780 W x 2780 H | PM1 MIN WALL = 190 MM | PM1 MIN WALL = GRILLE + 270 MM | PM1 MIN WALL = GRILLE + 300 MM |

INSTALLATION INSTRUCTIONS

- The Damper casing must completely penetrate the wall, and the blades, when in the closed position must be located in the plane of the wall and no closer than 40mm from a wall face. If the wall requires thickening to conform to above refer Footnote References.
- The hole in the wall shall allow a clearance of 12mm (1/2") all around for dampers up to 1200mm (47 1/4") on the largest dimension and 25mm (1") all around for dampers over 1200mm (47 1/4") on the largest dimension.
- Dampers should be installed with airflow direction as indicated on damper label.
- Insert duct spigot between the loosened slotted angle and damper body up to the bolt (see drawing) and apply mastic seal between the damper body and duct. Tighten bolts up to the slotted angle so that adjustments permitted by the slot locates the damper blades as mentioned in step (1). The square headed coach bolts provided locate into a square hole in the damper body, hence these bolts may easily be tightened from the outside of the damper.
- Remove the slotted angles from the other side of the damper. Insert the damper complete with duct through the wall opening and pack the expansion gap with non-combustible material capable of resisting a temperature of 1000°C.
- The duct may now be connected to the other side of the damper in a similar fashion as described in step (4) ensuring that the slotted angles are buffed against the wall securely, thus retaining the damper firmly in the wall. Where access is available from both sides of the wall at time of installation, do not connect fixing angles to the wall itself.
- Instal adequately sized access panel in adjoining duct so that access may be gained and the damper can be test operated.
- The damper body should not protrude more than 80mm (3 1/8") past the face of the wall.

FOOTNOTE References AS1668, PART 1, - 1979, PAGE 15, "4.3 - FIRE DAMPERS".

DISTRIBUTED BY:



I & M Industries

2 Joel Court, Moorabbin, Victoria, Australia 3189

P.O. Box 1165, Moorabbin, Victoria 3189

Telephone 9555 6955 Fax 9555 6465

A.B.C. DUCT COMPONENTRY PTY. LTD.

A.C.N. 005 137 575

TRADING AS: I & M INDUSTRIES

abc fire dampers 4 hour rated

DUCT FIXING

SECTIONAL VIEW OF MOUNTING ANGLE DETAIL FOR GRILLE SIDE OF STYLES B AND C

SECTIONAL VIEW OF MOUNTING ANGLE DETAIL FOR BOTH SIDES OF STYLES A AND DUCTED SIDE OF STYLES B AND C

TURN OUT ON DAMPER BODY

CLEARANCE "B" PACK WITH NON COMBUSTIBLE PACKING AS PER A.S. 1668 PART 1.

DIM "A"

2.5 MM THICK MOUNTING ANGLE

6 MM CUP HEAD SQUARE NECK BOLT, NUT AND WASHER THROUGH SQUARE HOLE IN DAMPER BODY

DAMPER BODY

EDGE OF DUCT WEDGED UNDER ANGLE AND PULLED TO SEAL BY BOLTS (ADD MASTIC IF REQUIRED)

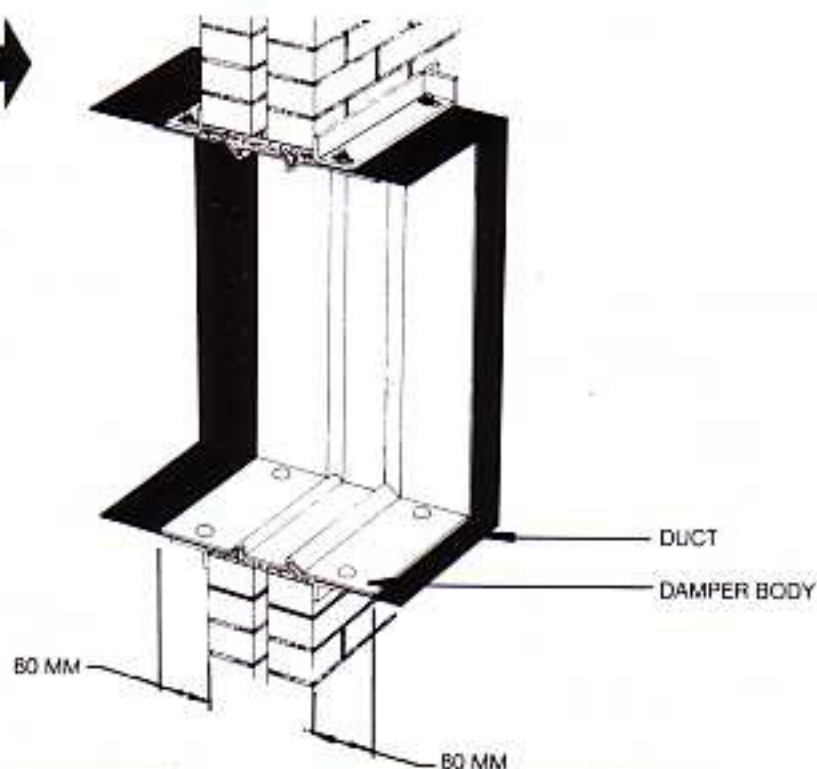
DIM "A"

40 MM LONG X 9 MM SLOT

| | FOR DAMPERS UP TO 1200 MM ON LARGEST DIMENSION | FOR DAMPERS 1201MM TO 2400MM ON LARGEST DIMENSION |
|---------------|--|---|
| DIM "A" | 30 MM | 50 MM |
| CLEARANCE "B" | 13 MM | 25 MM |

32MM
60 MM
80 MM

PERSPECTIVE SECTIONAL VIEW OF MOUNTING DETAIL (STYLE A ILLUSTRATED)



DUCT

DAMPER BODY

60 MM

60 MM

DISTRIBUTED BY:



I & M Industries

2 Joel Court, Moorabbin, Victoria, Australia 3189

P.O. Box 1165, Moorabbin, Victoria 3189

Telephone 9555 6955 Fax 9555 6465

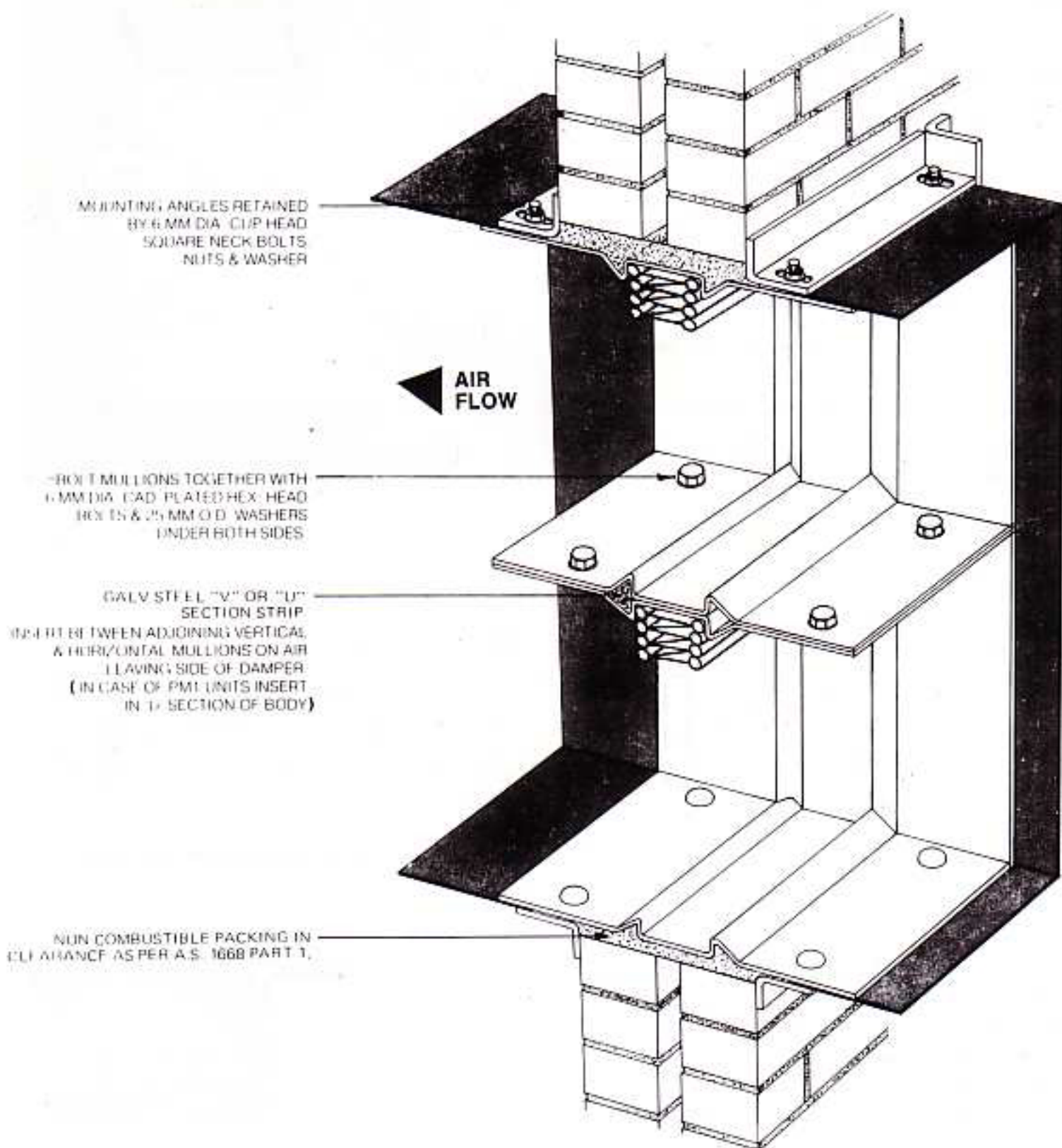
A.B.C. DUCT COMPONENTRY PTY. LTD.

A.C.N. 005 137 575

TRADING AS: I & M INDUSTRIES

abc fire dampers 4 hour rated

MODULAR ASSEMBLY DETAILS



DISTRIBUTED BY:



I & M Industries

2 Joel Court, Moorabbin, Victoria, Australia 3189

P.O. Box 1165, Moorabbin, Victoria 3189

Telephone 9555 6955 Fax 9555 6465

A.B.C. DUCT COMPONENTRY PTY. LTD.

A.C.N. 005 137 575

TRADING AS: I & M INDUSTRIES

1 - 3/99

All specifications are subject to alterations without notice