

JENSEN METAL PRODUCTS (NZ) LIMITED

Consistently High Standards of Workmanship....
Personalised and friendly customer service

In business over 40 years

SPECIALISTS IN

Heating, ventilation, air-conditioning ducting and accessories

PRODUCTS

A large range of round, rectangular and general sheet metal products.

STOCK

Various range of items in stock

CUSTOM JOBS / GENERAL FABRICATION

We can make almost anything you require up to 1.6mm thickness in galvanised steel and up to 1.0mm in stainless steel.

LOCATION



252 CHURCH STREET, ONEHUNGA

'The big green building on the corner' P O Box 12-467, Penrose, Auckland



NOTES ABOUT THIS CATALOGUE

- 1. A full page of all Jensen's standard products are pictured on pg 6
- 2. All prices are exclusive of GST and are ex factory
- 3. Trade / volume discounts apply
- 4. We are available to make anything to your own requirements
- 5. All items are in compliance with SMACNA duct standards
- 6. Diameters of stock round fittings are made to suit spiral internal diameter
- 7. Stock items returned for credit will incur a 20% restocking fee
- 8. In some instances a packaging fee may be charged

HOW TO ORDER

BY PHONE / FAX:

Phone us on (09) 634-3116 or fax (09) 636-4602, and our sales staff will be happy to assist you with any queries and take your order.

BY POST:

Post to P O Box 12-467, Penrose, Auckland.

BY EMAIL:

Email details to enquiries@jensenmetals.co.nz

DROP BY:

Visit us at 252 Church Street, Onehunga, Auckland. This is a very good way to discuss difficult drawings and dimensions for projects that you require.

HOW TO OPEN AN ACCOUNT

We have enclosed a credit account application form. Please tear out, fill in both sides and post or fax it to us. We will contact you when the account has been opened.



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CREDIT ACCOUNT APPLICATION



JENSENS STANDARD PRODUCTS









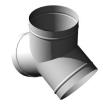
ADJUSTABLE BEND

FIXED BEND

ROUND PIPE

SPIRAL PIPE











UNEQUAL SPLITTER

EQUAL SPLITTER

CONNECTOR

FLANGED SPIGOT

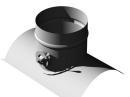
END CAP







SADDLE TAKE-OFF 45



SADDLE TAKE-OFF 90 + DAMPER



SADDLE TAKE OFF-45 + DAMPER



EQUAL TEE



ANGLE TEE



UNEQUAL ANGLE TEE



REDUCING TEE



DAMPER



REDUCER



ANTI DOWNDRAFT COWL



GAS COWL



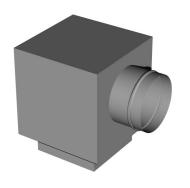
CHINAMANS HAT

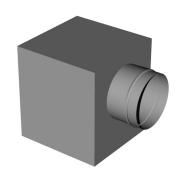


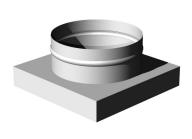
OTHER PRODUCTS

OTHER PRODUCT

PRICES AVAILABLE ON REQUEST







SIDE ENTRY GRILLE BOX LINED

SIDE ENTRY GRILLE BOX PLAIN

TOP ENTRY GRILLE BOX







CHIMNEY CAP











STAND OFF BRACKET

WE ALSO MAKE / SUPPLY TO ORDER

- Flashings
- Rainwater Heads
- General sheet metal products
- Perforated strapping
- Flexible duct connector



A FEW PRODUCT EXAMPLES



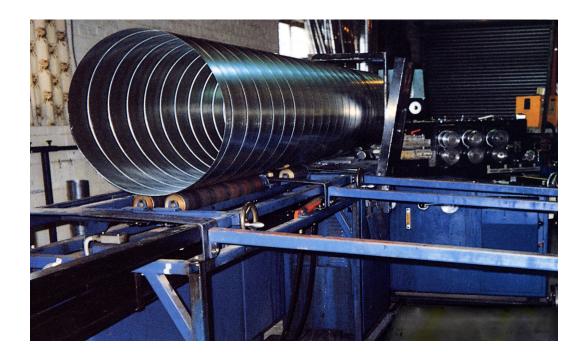






SPIRATUBE

We have our own Nokia machine



We carry extensive stocks in:
Galvanised 2 & 3 metre lengths
Stainless 3 metre lengths

We can also custom make in heavier gauges and longer lengths

SPIRATUBE USES:

- Duct for heating, ventilation and air conditioning
- Exhaust stacks
- Wood chip conveyers
- A casing for insulated oil supply pipe, chilled water pipes etc
- Concrete column and pile liners
- The barrel to support roller shutter doors and grilles
- A duct tube for joining pre-cast concrete componentry
- Fluming for water drainage projects
- Culvert pipe

ACOUSTIC AND THERMAL INSULATED DUCTS

Prices are available on application



SPIRATUBE S/STEEL

\$ PRICE PER METRE

| DIAMETER | Wall thickness | | |
|-----------|----------------|--------|--|
| (Nominal) | 0.55 0.7 | | |
| 75 | 25.00 | | |
| 100 | 29.80 | 40.10 | |
| 125 | 38.60 | 50.00 | |
| 150 | 46.40 | 59.80 | |
| 175 | 54.20 | 69.70 | |
| 200 | 61.90 | 79.80 | |
| 225 | 69.60 | 89.80 | |
| 250 | 77.50 | 99.60 | |
| 275 | 86.00 | 110.00 | |
| 300 | 93.20 | 119.30 | |
| 325 | 100.20 | 128.80 | |
| 350 | 108.40 | 139.70 | |
| 400 | 124.20 | 159.50 | |
| 450 | 139.30 | 180.20 | |
| 500 | 155.70 | 200.20 | |
| 550 | 171.30 | 219.60 | |
| 600 | 186.20 | 239.20 | |
| 650 | 203.70 | 261.10 | |
| 700 | 219.60 | 281.50 | |
| 750 | 233.80 | 300.20 | |
| 800 | | 321.70 | |
| 850 | | 341.00 | |
| 900 | | 360.20 | |
| 950 | | 379.80 | |
| 1000 | | 400.20 | |
| 1100 | | 415.30 | |
| 1200 | | 436.70 | |
| 1300 | | 459.40 | |

CONNECTOR END CAP

| \$ | \$ |
|-------|-------|
| 10.00 | 12.00 |
| 10.00 | 12.00 |
| 10.00 | 12.00 |
| 11.00 | 14.00 |
| 12.00 | 16.00 |
| 13.00 | 18.00 |
| 14.00 | 20.00 |
| 15.00 | 22.00 |
| 16.00 | 25.00 |
| 17.00 | 30.00 |
| 18.00 | 33.00 |
| 19.00 | 35.00 |
| 20.00 | 40.00 |
| 22.50 | 48.00 |
| 25.00 | 55.00 |
| 28.00 | 75.00 |
| 32.00 | 85.00 |

Spiral



Connector



End Cap



STOCK LENGTHS: 3 METRES

SPIRATUBE GALVANISED

SPIRATUBE GALVANISED

\$ PRICE PER METRE

| | | | | | | ı | | | |
|-----------|-------|-------|------------|--------|--------|----|---------|---|---------|
| DIAMETER | | Wa | all thickr | ness | | CC | NNECTOF | 2 | END CAP |
| (Nominal) | 0.45 | 0.55 | 0.75 | 0.95 | 1.15 | | \$ | | \$ |
| 75 | 6.70 | 8.40 | 10.30 | | | | 6.00 | | 10.00 |
| 100 | 7.30 | 8.80 | 11.80 | 14.80 | 17.40 | | 6.00 | | 10.00 |
| 125 | 9.10 | 10.80 | 14.50 | 18.30 | 21.80 | | 6.00 | | 10.00 |
| 150 | 10.80 | 13.00 | 17.40 | 21.80 | 26.20 | | 6.50 | | 10.00 |
| 175 | 12.70 | 15.30 | 20.20 | 25.30 | 30.40 | | 7.00 | | 11.00 |
| 200 | 14.40 | 17.40 | 23.10 | 28.90 | 34.60 | | 7.50 | | 12.00 |
| 225 | 16.30 | 19.60 | 26.20 | 32.40 | 39.10 | | 8.00 | | 13.00 |
| 250 | 18.10 | 21.80 | 29.00 | 36.10 | 43.40 | | 8.50 | | 14.00 |
| 275 | 19.90 | 23.80 | 32.00 | 39.70 | 47.90 | | 9.00 | | 15.50 |
| 300 | 21.90 | 26.20 | 34.60 | 43.60 | 52.20 | | 9.50 | | 17.00 |
| 325 | | 28.20 | 37.40 | 47.00 | 56.10 | | 10.00 | | 18.00 |
| 350 | | 30.40 | 40.50 | 50.80 | 60.80 | | 10.50 | | 19.00 |
| 400 | | 34.60 | 46.30 | 58.00 | 69.50 | | 11.00 | | 21.00 |
| 450 | | 39.10 | 52.10 | 65.10 | 77.80 | | 12.00 | | 23.00 |
| 500 | | 43.60 | 58.00 | 72.30 | 86.80 | | 13.00 | | 26.00 |
| 550 | | 47.90 | 63.60 | 80.10 | 96.30 | | 16.00 | | 30.00 |
| 600 | | 56.70 | 69.50 | 86.80 | 104.10 | | 18.00 | | 36.00 |
| 650 | | 26.70 | 75.50 | 94.70 | 113.20 | | 21.00 | | 40.00 |
| 700 | | 60.50 | 81.40 | 102.10 | 121.20 | | 24.00 | | 45.00 |
| 750 | | | 86.70 | 108.60 | 130.10 | | 26.00 | | 50.00 |
| 800 | | | 93.00 | 116.70 | 140.80 | | 30.00 | | 80.00 |
| 850 | | | 98.50 | 123.40 | 150.20 | | 32.00 | | 100.00 |
| 900 | | | 104.00 | 130.10 | 157.70 | | 33.00 | | 115.00 |
| 950 | | | | 137.40 | 165.80 | | 35.00 | | 135.00 |
| 1000 | | | | 144.60 | 173.50 | | 37.00 | | 150.00 |
| 1100 | | | | | 187.40 | | 41.00 | | 170.00 |
| 1200 | | | | | 204.50 | | 45.00 | | 185.00 |
| 1300 | | | | | 219.50 | | 50.00 | | 200.00 |

| LIND CAP |
|----------|
| \$ |
| 10.00 |
| 10.00 |
| 10.00 |
| 10.00 |
| 11.00 |
| 12.00 |
| 13.00 |
| 14.00 |
| 15.50 |
| 17.00 |
| 18.00 |
| 19.00 |
| 21.00 |
| 23.00 |
| 26.00 |
| 30.00 |
| 36.00 |
| 40.00 |
| 45.00 |
| 50.00 |
| 80.00 |
| 100.00 |
| 115.00 |
| 135.00 |
| 150.00 |
| 170.00 |
| 185.00 |
| 200.00 |
| |



Standard wall thickness

STOCK LENGTHS: 2 & 3 METRES

We can also custom make longer lengths

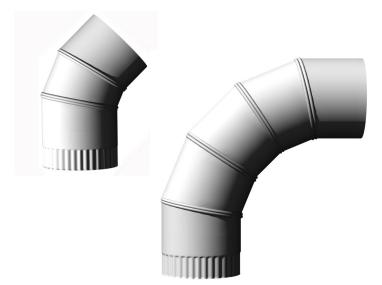


JENSEN ADJUSTABLE BENDS

Jensen Adjustable Bends, sometimes known as a lobster back.

Available in both 45 ° and 90° bends

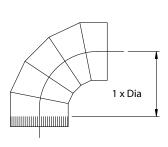
45° 3 segment
Adjustable
0 to 45 degrees



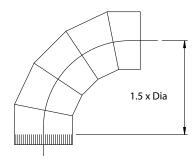
90 ° 5 segment Adjustable 0 to 90 degrees

90° bends are available in short and long radius. The most commonly used is short radius.

Short Radius
1.0 Dia C/L Radius



Long Radius
1.5 Dia C/L Radius



- 5 segment bends provide smooth air flow through 90°
- We have an extensive range of bends in stock. Stocks are made from 0.55mm galvanised or stainless steel
- Jensen Bends are also available in 0.75mm galvanised and stainless steel
- Offsets can be obtained by joining two adjustable bends

Note: For low pressure systems the joints should either be sealed with metal sealant and/or duct tape after the angle is set.



ADJUSTABLE BENDS

GALVANISED

| DIAMETER | 90° SHORT RADIUS \$ | 45° SHORT RADIUS \$ | 90° LONG RADIUS \$ |
|----------|------------------------------|------------------------------|-----------------------------|
| 75 | 14.00 | 11.50 | 16.70 |
| 100 | 15.70 | 12.90 | 18.90 |
| 125 | 18.00 | 14.80 | 21.60 |
| 150 | 18.70 | 15.30 | 22.50 |
| 175 | 21.40 | 17.70 | 25.80 |
| 200 | 24.00 | 19.70 | 28.80 |
| 225 | 31.60 | 26.00 | 38.00 |
| 250 | 33.90 | 27.80 | 40.60 |
| 275 | 41.90 | 34.40 | 50.30 |
| 300 | 49.00 | 40.20 | 58.90 |
| 325 | 58.50 | 48.00 | 70.10 |
| 350 | 67.50 | 55.40 | 81.00 |
| 375 | 81.00 | 66.50 | 97.20 |
| 400 | 89.90 | 73.70 | 108.00 |
| 450 | 101.80 | 83.50 | 122.20 |
| 500 | 108.70 | 89.10 | 130.40 |
| 550 | 122.90 | 100.80 | |
| 600 | 142.90 | 117.20 | |
| 650 | 157.50 | 129.20 | |
| 700 | 177.30 | 145.40 | |
| 750 | 230.60 | 189.00 | |

STAINLESS STEEL

| DIAMETER | 90° SHORT RADIUS \$ | 45° SHORT RADIUS \$ |
|----------|------------------------------|------------------------------|
| 75 | 26.75 | 21.10 |
| 100 | 29.80 | 23.70 |
| 125 | 33.00 | 26.50 |
| 150 | 38.25 | 30.50 |
| 175 | 44.75 | 35.75 |
| 200 | 51.00 | 40.75 |
| 225 | 57.50 | 46.00 |
| 250 | 70.25 | 56.00 |
| 275 | 89.25 | 71.50 |
| 300 | 115.00 | 91.75 |
| 325 | 140.00 | 112.50 |
| 350 | 165.00 | 132.50 |
| 375 | 190.00 | 155.00 |
| 400 | 220.00 | 175.00 |
| 450 | 250.00 | 200.00 |
| 500 | 280.00 | 225.00 |
| 550 | 330.00 | 265.00 |
| 600 | 380.00 | 305.00 |





Long radius Stainless Steel prices available on application



FIXED BENDS

GALVANISED

| DIAMETER | 90° SHORT RADIUS \$ | 45° SHORT RADIUS \$ | 90° LONG RADIUS \$ |
|----------|------------------------------|------------------------------|-----------------------------|
| 75 | 36.00 | 27.00 | 43.50 |
| 100 | 41.00 | 31.00 | 50.00 |
| 125 | 49.00 | 37.00 | 60.00 |
| 150 | 58.00 | 44.00 | 70.00 |
| 175 | 65.00 | 48.00 | 75.00 |
| 200 | 67.50 | 50.00 | 80.00 |
| 225 | 72.50 | 55.00 | 85.00 |
| 250 | 77.50 | 58.00 | 95.00 |
| 275 | 84.00 | 63.00 | 100.00 |
| 300 | 90.00 | 68.00 | 110.00 |
| 325 | 96.50 | 72.50 | 115.00 |
| 350 | 105.00 | 77.50 | 125.00 |
| 400 | 122.50 | 92.50 | 150.00 |
| 450 | 142.50 | 107.50 | 170.00 |
| 500 | 167.50 | 125.00 | 200.00 |
| 550 | 210.00 | 155.00 | 250.00 |
| 600 | 225.00 | 170.00 | 270.00 |
| 650 | 260.00 | 192.50 | 310.00 |
| 700 | 325.00 | 245.00 | 390.00 |
| 750 | 390.00 | 290.00 | 465.00 |
| 800 | 450.00 | 340.00 | 540.00 |
| 900 | 580.00 | 435.00 | 700.00 |
| 950 | 650.00 | 485.00 | 775.00 |
| 1000 | 710.00 | 535.00 | 850.00 |
| 1100 | 840.00 | 630.00 | 1005.00 |

STAINLESS STEEL

| DIAMETER | 90° SHORT RADIUS \$ | 45° SHORT RADIUS \$ |
|----------|------------------------------|------------------------------|
| 75 | 72.50 | 55.00 |
| 100 | 82.50 | 62.50 |
| 125 | 105.00 | 77.50 |
| 150 | 115.00 | 85.00 |
| 175 | 125.00 | 95.00 |
| 200 | 135.00 | 100.00 |
| 225 | 145.00 | 110.00 |
| 250 | 155.00 | 120.00 |
| 275 | 165.00 | 125.00 |
| 300 | 180.00 | 135.00 |
| 325 | 230.00 | 170.00 |
| 350 | 275.00 | 205.00 |
| 400 | 370.00 | 280.00 |
| 450 | 470.00 | 350.00 |



Increased centre line radius and / or varying degrees available on request



REDUCERS

| DIAMETER LARGE END | GALV \$ | S/STEEL \$ |
|-----------------------|------------|---------------|
| 100 | 28.00 | 43.00 |
| 125 | 29.00 | 44.00 |
| 150 | 30.00 | 45.00 |
| 175 | 32.00 | 47.00 |
| 200 | 35.00 | 50.00 |
| 225 | 38.00 | 56.50 |
| 250 | 41.00 | 62.50 |
| 275 | 44.00 | 69.00 |
| 300 | 48.00 | 75.00 |
| 325 | 52.00 | 81.50 |
| 350 | 55.00 | 87.50 |
| 400 | 62.00 | 100.00 |
| 450 | 72.00 | 112.50 |
| 500 | 82.00 | 137.50 |
| 550 | 120.00 | 162.50 |
| 600 | 135.00 | 187.50 |
| 650 | 145.00 | 225.00 |
| 700 | 160.00 | 262.50 |
| 750 | 170.00 | |
| 800 | 250.00 | |
| 900 | 300.00 | |
| 1000 | 370.00 | |





Transitions or square to round reducers also available.

Pricing on request.



ANGLE TEE

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 75 | 42.50 | 70.00 |
| 100 | 42.50 | 70.00 |
| 125 | 42.50 | 70.00 |
| 150 | 48.00 | 80.00 |
| 175 | 53.00 | 90.00 |
| 200 | 60.00 | 105.00 |
| 225 | 70.00 | 120.00 |
| 250 | 80.00 | 135.00 |
| 275 | 90.00 | 160.00 |
| 300 | 100.00 | 190.00 |
| 325 | 110.00 | 200.00 |
| 350 | 115.00 | 220.00 |
| 400 | 125.00 | 250.00 |
| 450 | 150.00 | 275.00 |
| 500 | 175.00 | |
| 550 | 215.00 | |
| 600 | 250.00 | |
| 650 | 285.00 | |
| 700 | 335.00 | |
| 750 | 390.00 | |
| 800 | 420.00 | |
| 850 | 430.00 | |
| 900 | 470.00 | |
| 950 | 520.00 | |
| 1000 | 580.00 | |
| 1100 | 645.00 | |
| 1200 | 710.00 | |
| 1300 | 850.00 | |



Standard branch angle 30°, 45°, 60°



EQUAL & UNEQUAL TEE'S

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 75 | 35.00 | 55.00 |
| 100 | 35.00 | 55.00 |
| 125 | 35.00 | 55.00 |
| 150 | 37.50 | 65.00 |
| 175 | 40.00 | 77.50 |
| 200 | 45.00 | 90.00 |
| 225 | 55.00 | 105.00 |
| 250 | 65.00 | 125.00 |
| 275 | 75.00 | 145.00 |
| 300 | 80.00 | 170.00 |
| 350 | 95.00 | 195.00 |
| 400 | 110.00 | 220.00 |
| 450 | 125.00 | 245.00 |
| 500 | 150.00 | 285.00 |
| 550 | 190.00 | 335.00 |
| 600 | 215.00 | 400.00 |
| 650 | 245.00 | |
| 700 | 285.00 | |
| 750 | 325.00 | |
| 800 | 350.00 | |
| 850 | 358.00 | |
| 900 | 390.00 | |
| 950 | 460.00 | |
| 1000 | 520.00 | |
| 1100 | 580.00 | |
| 1200 | 650.00 | |
| 1300 | 780.00 | |





REDUCING ANGLE TEE

| DIAMETERS | GALV \$ |
|-------------|------------|
| 125/75/75 | 52.50 |
| 125/100/100 | 52.50 |
| 150/100/100 | 52.50 |
| 150/125/125 | 52.50 |
| 175/100/100 | 57.50 |
| 175/125/125 | 57.50 |
| 200/150/150 | 62.50 |
| 200/175/175 | 62.50 |
| 225/150/150 | 72.50 |
| 225/175/175 | 72.50 |
| 225/200/200 | 72.50 |
| 250/175/175 | 82.50 |
| 250/200/200 | 82.50 |
| 250/225/225 | 82.50 |
| 275/200/200 | 95.00 |
| 275/225/225 | 95.00 |
| 275/250/250 | 95.00 |
| 300/200/200 | 105.00 |
| 300/225/225 | 105.00 |
| 300/250/250 | 105.00 |
| 325/250/250 | 115.00 |
| 325/275/275 | 115.00 |
| 325/300/300 | 115.00 |
| 350/250/250 | 125.00 |
| 350/275/275 | 125.00 |
| 350/300/300 | 125.00 |
| 350/325/325 | 125.00 |
| 400/250/250 | 135.00 |
| 400/275/275 | 135.00 |
| 400/300/300 | 135.00 |
| 450/300/300 | 155.00 |
| 450/350/350 | 155.00 |
| 500/350/350 | 170.00 |
| 500/400/400 | 170.00 |
| 550/400/400 | 190.00 |
| 550/450/450 | 190.00 |
| 600/450/450 | 225.00 |
| 600/500/500 | 225.00 |



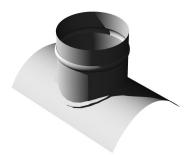


SADDLE T/OFF

GALVANISED

| 30°. 45°. 60° 90° | | |
|-------------------|---------------------|--------|
| DIAMETER | 30°, 45°, 60° \$ | \$ |
| 75 | * | |
| 75 | 27.00 | 22.00 |
| 100 | 27.00 | 22.00 |
| 125 | 27.00 | 22.00 |
| 150 | 28.00 | 23.00 |
| 175 | 29.00 | 24.00 |
| 200 | 32.50 | 26.00 |
| 225 | 36.00 | 29.00 |
| 250 | 41.50 | 34.00 |
| 275 | 48.50 | 40.00 |
| 300 | 58.00 | 46.00 |
| 325 | 65.00 | 51.00 |
| 350 | 73.00 | 58.00 |
| 400 | 90.00 | 77.00 |
| 450 | 101.00 | 87.00 |
| 500 | 120.00 | 98.00 |
| 550 | 135.00 | 120.00 |
| 600 | 175.00 | 142.00 |
| 650 | 230.00 | 162.00 |
| 700 | 290.00 | 220.00 |
| 750 | 360.00 | 290.00 |
| 800 | 485.00 | 370.00 |
| 900 | 505.00 | 415.00 |
| 950 | 525.00 | 435.00 |



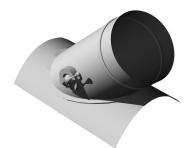


Flat plate options available

SADDLE T/OFF + DAMPER

GALVANISED

| DIAMETER | 30°, 45°, 60° \$ | 90° \$ |
|----------|---------------------|-----------|
| 75 | 42.00 | 37.00 |
| 100 | 42.00 | 37.00 |
| 125 | 42.00 | 37.00 |
| 150 | 44.00 | 38.00 |
| 175 | 48.00 | 42.00 |
| 200 | 52.00 | 46.00 |
| 225 | 60.00 | 52.00 |
| 250 | 67.00 | 59.00 |
| 275 | 77.00 | 65.00 |
| 300 | 90.00 | 77.00 |
| 325 | 100.00 | 83.00 |
| 350 | 115.00 | 93.00 |
| 400 | 135.00 | 114.00 |
| 450 | 150.00 | 128.00 |
| 500 | 170.00 | 142.00 |



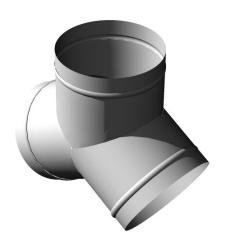


Flat plate options available



EQUAL SPLITTERS

| DIAMETER | GALV \$ |
|----------|------------|
| 75 | 32.00 |
| 100 | 32.00 |
| 125 | 32.00 |
| 150 | 35.00 |
| 175 | 38.00 |
| 200 | 42.00 |
| 225 | 47.50 |
| 250 | 52.50 |
| 275 | 57.50 |
| 300 | 62.50 |
| 325 | 72.50 |
| 350 | 82.50 |



UNEQUAL SPLITTERS

| DIAMETER | GALV \$ |
|-------------|------------|
| 125/75/75 | 47.00 |
| 125/100/100 | 47.00 |
| 150/100/100 | 49.00 |
| 150/125/125 | 49.00 |
| 175/100/100 | 52.00 |
| 175/125/125 | 52.00 |
| 200/100/100 | 55.00 |
| 200/150/150 | 55.00 |
| 200/175/175 | 55.00 |
| 225/150/150 | 58.00 |
| 225/175/175 | 58.00 |
| 225/200/200 | 58.00 |
| 250/175/175 | 61.00 |
| 250/200/200 | 61.00 |
| 250/225/225 | 61.00 |
| 275/200/200 | 66.00 |
| 275/225/225 | 66.00 |
| 275/250/250 | 66.00 |
| 300/200/200 | 72.00 |
| 300/225/225 | 72.00 |
| 300/250/250 | 72.00 |
| 325/250/250 | 83.00 |
| 325/275/275 | 83.00 |
| 325/300/300 | 83.00 |
| 350/250/250 | 93.00 |
| 350/275/275 | 93.00 |
| 350/300/300 | 93.00 |
| 350/325/325 | 93.00 |
| 400/300/300 | 98.00 |
| 450/350/350 | 108.00 |





FLANGED SPIGOTS

| | CALV | CICTEEL |
|----------|------------|---------------|
| DIAMETER | GALV \$ | S/STEEL \$ |
| 75 | 6.50 | 10.00 |
| 100 | 6.50 | 10.00 |
| 125 | 6.50 | 10.00 |
| 150 | 7.00 | 11.00 |
| 175 | 7.50 | 12.00 |
| 200 | 8.00 | 13.00 |
| 225 | 8.50 | 14.00 |
| 250 | 9.00 | 15.00 |
| 275 | 10.00 | 16.00 |
| 300 | 11.00 | 18.00 |
| 350 | 12.00 | 21.00 |
| 400 | 13.00 | 24.00 |
| 450 | 14.00 | 27.00 |
| 500 | 17.00 | 30.00 |
| 550 | 20.00 | 35.00 |
| 600 | 24.00 | 42.00 |



QUADRANT DAMPER

| DIAMETER | GALV 90° |
|----------|----------|
| 75 | 26.00 |
| 100 | 26.00 |
| 125 | 26.00 |
| 150 | 27.00 |
| 175 | 28.00 |
| 200 | 29.00 |
| 225 | 31.00 |
| 250 | 33.00 |
| 275 | 35.00 |
| 300 | 37.00 |
| 325 | 40.00 |
| 350 | 42.00 |
| 400 | 52.00 |
| 450 | 72.00 |
| 500 | 88.00 |
| 550 | 103.00 |
| 600 | 124.00 |



Options: - in line - flange mounted



ROUND PIPE

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 100 | 18.00 | 40.00 |
| 115 | 18.00 | 40.00 |
| 125 | 18.00 | 40.00 |
| 150 | 20.00 | 45.00 |
| 175 | 22.00 | 55.00 |
| 200 | 24.00 | 65.00 |
| 225 | 26.50 | 75.00 |
| 250 | 29.00 | 85.00 |
| 275 | 32.00 | 95.00 |
| 300 | 35.00 | 103.00 |
| 325 | 38.00 | 110.00 |
| 350 | 41.00 | 120.00 |
| 400 | 47.00 | 130.00 |
| 450 | 51.00 | 145.00 |
| 500 | 75.00 | 170.00 |
| 550 | 85.00 | 190.00 |
| 600 | 90.00 | 210.00 |
| 650 | 95.00 | 230.00 |
| 700 | 100.00 | |



1200mm long

Pricing for other diameters and shorter lengths available on request.



CHINAMANS HAT

Vent Cowl

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 75 | 42.00 | 65.00 |
| 100 | 42.00 | 65.00 |
| 125 | 42.00 | 65.00 |
| 150 | 48.00 | 75.00 |
| 175 | 56.00 | 85.00 |
| 200 | 62.00 | 95.00 |
| 225 | 75.00 | 115.00 |
| 250 | 83.00 | 135.00 |
| 275 | 90.00 | 155.00 |
| 300 | 110.00 | 190.00 |
| 350 | 135.00 | 230.00 |
| 400 | 165.00 | 280.00 |
| 450 | 195.00 | 340.00 |
| 500 | 225.00 | 440.00 |
| 550 | 280.00 | 520.00 |
| 600 | 335.00 | 610.00 |
| 700 | 380.00 | |
| 750 | 435.00 | |
| 800 | 525.00 | |
| 850 | 545.00 | |
| 900 | 580.00 | |
| 950 | 670.00 | |
| 1000 | 775.00 | |
| 1100 | 970.00 | |
| 1200 | 1170.00 | |



Includes inverted cone



ANTI DOWN DRAFT COWL

Wood fire

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 100 | 47.00 | 80.00 |
| 115 | 47.00 | 85.00 |
| 125 | 47.00 | 85.00 |
| 150 | 52.00 | 93.00 |
| 175 | 57.00 | 103.00 |
| 200 | 67.00 | 124.00 |
| 225 | 78.00 | 150.00 |
| 250 | 93.00 | 175.00 |
| 275 | 103.00 | 202.00 |
| 300 | 114.00 | 220.00 |



GAS COWL

Gas fire

| DIAMETER | GALV \$ | S/STEEL \$ |
|----------|------------|---------------|
| 75 | 42.00 | 55.00 |
| 100 | 42.00 | 55.00 |
| 125 | 42.00 | 67.00 |
| 150 | 47.00 | 83.00 |
| 175 | 57.00 | 103.00 |
| 200 | 67.00 | 124.00 |
| 225 | 83.00 | 155.00 |
| 250 | 120.00 | 200.00 |
| 275 | 135.00 | 220.00 |
| 300 | 160.00 | 240.00 |



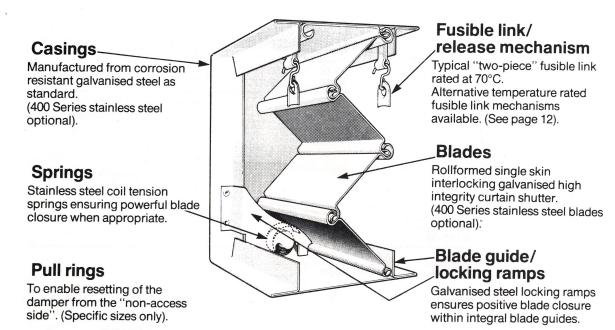


FIRE DAMPERS

Our range of fire dampers are designed to stop the spread of fire through ducts, walls and floors. The range incorporates features required by specifiers, contractors and fire authorities, and embodies the experience of Advanced Air (UK) Ltd, in the design and manufacture of our fire dampers.

Fire dampers have been fire tested to B.S. 476 part 8 FROSI report No. 6110. Fire dampers are F.R.C. (NZ) approved.

PRODUCT FEATURES



The illustration is Model (P) Plain

Casings: are manufactured from 0.75mm galvanised steel

Blades: are specially rollformed from 0.75mm galvanised mild steel

Fusible Link: supplied rated at 70 degrees Celsius nominal

| Features | Mo | odel Referenc | es |
|-------------------------------------|-------------|---------------|-------------|
| | Plain | Capped | Other |
| Spigot Connections | | | Yes |
| Case Depth Dimensions (nominal) | 108mm | 108mm | 108mm |
| Maximum Duct Module Size (W x H) | 1525 x 1525 | 1525 x 1350 | 1475 x 1350 |

All models, are as standard, manufactured from galvanised mild steel.



FUSIBLE ELEMENTS

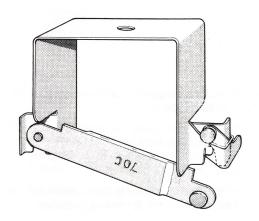
Flat Bar Link



This "Flat-Bar" Link is the standard link used, and is held in position by removable chain links.

70 degree Celsius Standard

Test Latch



Allows the Fire Damper to be tested quickly and safely. The damper can be mechanically released and reloaded with one hand on small units from indicated side of the duct.

WEIGHT CHART

Indicative weights in kilograms

| Nominal D Size | • | | | | ١ | WIDTH | l (mm) | 1 | | | | |
|-------------------|------|-----|-----|-----|-----|-------|--------|-----|-----|------|------|------|
| | | 150 | 200 | 300 | 400 | 450 | 600 | 750 | 900 | 1050 | 1200 | 1500 |
| | 200 | 1 | 2 | 2 | 3 | 3 | 5 | 6 | 6 | 8 | 9 | 10 |
| Н | 300 | 2 | 2 | 3 | 4 | 4 | 5 | 7 | 7 | 9 | 10 | 12 |
| Ë | 450 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 8 | 10 | 12 | 15 |
| Ī | 600 | 4 | 4 | 6 | 7 | 7 | 8 | 9 | 10 | 12 | 13 | 17 |
| G | 750 | 4 | 5 | 6 | 8 | 8 | 9 | 10 | 11 | 12 | 14 | 19 |
| H | 900 | 6 | 6 | 7 | 8 | 8 | 10 | 11 | 12 | 14 | 15 | 21 |
| T (******) | 1050 | 8 | 8 | 9 | 10 | 10 | 12 | 12 | 14 | 16 | 18 | 25 |
| (mm) | 1200 | 9 | 9 | 10 | 12 | 12 | 13 | 14 | 15 | 18 | 23 | 28 |
| | 1350 | 11 | 11 | 12 | 14 | 14 | 16 | 17 | 17 | 20 | 26 | 31 |
| | 1500 | 13 | 13 | 14 | 16 | 16 | 17 | 19 | 20 | 24 | 30 | 36 |

Notes:

- 1. Above weights are relevant to Plain models
- 2. Capped and Round Models a multiplier of 1.5 on the above weights should be used



ORDER REQUIREMENTS

When ordering Fire Dampers and Sleeves we require the following information

Fire Dampers

- Type (refer to coding below)
- Dimensions always specify width first then height
- Horizontal or Vertical installation

Sleeves

- Thickness of wall, floor or ceiling
- Means of connecting to duct, both upstream and downstream

Fire Damper Coding

| No. | Code | Name |
|-----|------|----------------------|
| 1 | FD | FIRE DAMPER |
| 2 | Р | PLAIN |
| | С | CAPPED |
| | R | ROUND |
| | S | SQUARE / RECTANGULAR |
| | 0 | OVAL |
| 3 | V | VERTICAL |
| | Н | HORIZONTAL |
| 4 | T | TEST LATCH |

Examples of coding used when ordering:

1 2 3 4
FDCHT Fire Damper / Capped / Horizontal / Test Latch

FDSVT Fire Damper / Square / Vertical / Test Latch

Notes:

For openings larger than our maximum sizes, multiple dampers would be required.

In a horizontal duct run should the velocity exceed 10m/sec, a spring assisted closure will be required.

All fire dampers must be tested when installed and then tested annually to comply with NZ Building Act and Local Council requirements.



INSTALLATION OF FIRE DAMPERS

- 1. Mounting in a wall, floor or ceiling the Fire Damper sleeve shall completely penetrate the wall and shall be retained: -
 - On both sides by means of mounting flanges in such a manner that it can expand in a fire without distorting the blades in a closed position.
 - On the accessible side by means of one mounting flange only, which can be fixed to the fire damper sleeve and to the wall through slotted holes to allow expansion.

Mounting flanges shall be butted against the face of the wall, floor or ceiling, and fixed to the fire damper sleeve. The width of the angle section of the flange shall be not less than twice the clearance between the fire damper body and the penetration.

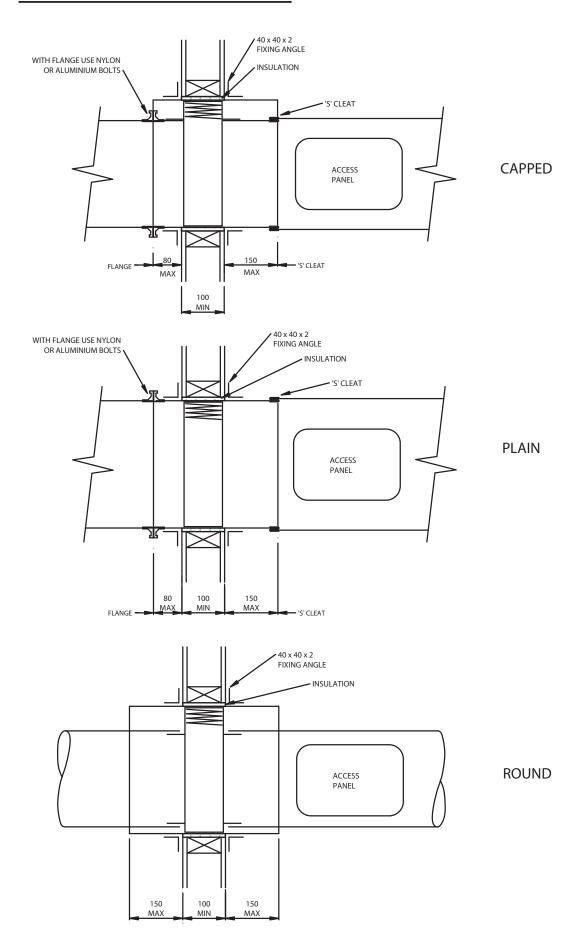
- 2. The fire damper shall be installed so that the airflow does not impede the closure of the fire damper.
- 3. The method of attachment of ductwork to the fire damper shall be such that any deformation or collapse of the ductwork in a fire does not dislodge the fire damper or adversely affect its operation or performance. This is achieved by using either an "S" cleat type joint or flanged joint using nylon or aluminium bolts.
- 4. Trimmed opening size in wall, floor or ceiling is overall fire damper / sleeve size + 1% + 10mm both width and height. Insulated packing material around fire damper shall be placed in the space between the fire damper sleeve and surrounding construction in order to prevent free flow of combustion products. The material shall be packed so that it fills the space uniformly without impairing the operational performance of the fire damper. The surrounding material shall maintain its integrity at temperatures up to 1000°C.
- 5. The length of the fire damper sleeve to extend beyond the face of the wall, floor or ceiling shall not exceed 150mm for an "S" cleat joint or 80mm for a flanged joint.
- 6. Access panel required for on site annual testing.

SLEEVE MATERIAL

| Longest Side | | |
|--------------|----------------|------|
| 0 - 600 | 0.75 Galv M.S. | 22 # |
| 605 - 1000 | 0.95 Galv M.S. | 20 # |
| 1005 - 1500 | 1.15 Galv M.S. | 18 # |
| 1505 - 2400 | 1.55 Galv M.S. | 16 # |



SLEEVE ARRANGEMENTS



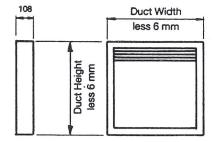


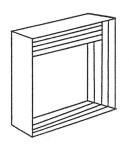
FIRE DAMPER PRODUCT SELECTION GUIDE & DIMENSIONAL DATA

PRODUCT SELECTION GUIDE & DIMENSIONAL DATA

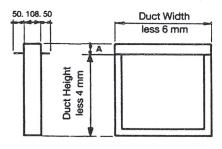
DIAGRAM

P Plain

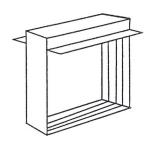




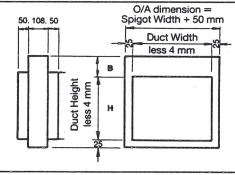
C Capped



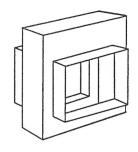
| Duct Height H | A |
|------------------|-----|
| 100 – 300 | 50 |
| 301 – 525 | 75 |
| 526 – 700 | 100 |
| 701 – 925 | 125 |
| 926 – 1150 | 150 |
| 1151 – 1350 | 175 |



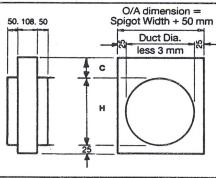
S Square



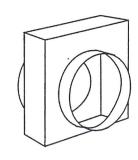
| Duct Height H | В |
|------------------|-----|
| 100 – 300 | 50 |
| 301 – 525 | 75 |
| 526 – 700 | 100 |
| 701 – 925 | 125 |
| 926 – 1150 | 150 |
| 1175 – 1350 | 175 |



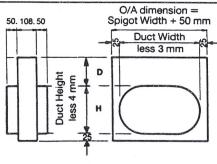
Round



| Duct Height H | С |
|------------------|-----|
| 100 – 300 | 50 |
| 301 – 525 | 75 |
| 526 – 700 | 100 |
| 701 – 925 | 125 |
| 926 – 1150 | 150 |
| 1175 – 1350 | 175 |

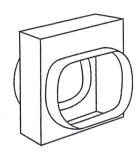


O Oval



| Duct Height H | D |
|------------------|-----|
| 100 – 300 | 50 |
| 301 – 525 | 75 |
| 526 - 700 | 100 |
| 701 – 925 | 125 |
| 926 – 1150 | 150 |
| 1175 – 1350 | 175 |

All dimensions in mm.





FIRE DAMPERS - PLAIN VERTICAL

FDPVT

FIRE DAMPER: PLAIN, VERTICAL, TEST LATCH

WIDTE

| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 220 | 600 | 650 | 700 | 750 | 800 | 900 | 1000 | 1100 | 1200 |
|-------------|-----|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 150 | 69 | 62 | 64 | 29 | 70 | 74 | 79 | 84 | 88 | 93 | 97 | 102 | 107 | 111 | 120 | 129 | 136 | 146 |
| 200 | 62 | 64 | 2 9 | 70 | 74 | 79 | 84 | 88 | 93 | 97 | 102 | 107 | 111 | 115 | 125 | 134 | 142 | 153 |
| 250 | 64 | 29 | 02 | 74 | 79 | 84 | 88 | 93 | 97 | 102 | 107 | 111 | 115 | 121 | 132 | 140 | 149 | 159 |
| 300 | 29 | 02 | 74 | 79 | 84 | 88 | 93 | 6 | 102 | 107 | 111 | 115 | 121 | 125 | 138 | 146 | 155 | 164 |
| 320 | 0/ | 74 | 62 | 84 | 88 | 93 | 97 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 144 | 153 | 161 | 171 |
| 400 | 74 | 62 | 84 | 88 | 93 | 26 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 150 | 159 | 167 | 178 |
| 450 | 6/ | 84 | 88 | 93 | 97 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 157 | 164 | 173 | 183 |
| 200 | 84 | 88 | 63 | 6 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 162 | 171 | 179 | 187 |
| 220 | 88 | 66 | 26 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 168 | 178 | 186 | 196 |
| 009 | 66 | 26 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 167 | 174 | 183 | 191 | 202 |
| e 20 | 26 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 167 | 174 | 181 | 189 | 198 | 208 |
| 200 | 102 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 167 | 174 | 181 | 187 | 196 | 205 | 214 |
| 750 | 107 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 167 | 174 | 181 | 187 | 192 | 202 | 210 | 219 |
| 800 | 111 | 115 | 121 | 125 | 132 | 138 | 145 | 153 | 160 | 167 | 174 | 181 | 187 | 194 | 200 | 210 | 219 | 230 |
| 900 | 120 | 125 | 132 | 138 | 144 | 148 | 157 | 162 | 168 | 174 | 181 | 187 | 192 | 200 | 210 | 219 | 230 | 238 |
| 1000 | 129 | 134 | 140 | 146 | 153 | 159 | 164 | 171 | 178 | 183 | 189 | 196 | 202 | 210 | 219 | 230 | 238 | 248 |
| 1100 | 136 | 142 | 149 | 155 | 161 | 167 | 173 | 179 | 186 | 191 | 198 | 205 | 210 | 219 | 230 | 238 | 248 | 258 |
| 1200 | 146 | 153 | 159 | 164 | 171 | 178 | 183 | 187 | 196 | 202 | 208 | 214 | 219 | 230 | 238 | 248 | 258 | 267 |



FIRE DAMPERS - PLAIN HORIZONTAL

FDPHT

FIRE DAMPER: PLAIN, HORIZONTAL, TEST LATCH

MIDTH

| 50095969799102107112116122125130134144144144144145153161170170500959799102107112116122125130134140144148158167170170500991021071121161221251301341401441481541581671701704001121021071121161221251301341401441481541681701701804001141211221201331381421481531401441481541541641481541641701404001141211221301331381421481531571611621621701481531421481531571611621701 | mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 550 | 009 | 650 | 200 | 750 | 800 | 900 | 1000 | 1100 | 1200 |
|--|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 95 97 99 102 107 112 116 122 125 130 134 140 144 148 154 168 156 170 170 170 170 171 116 122 125 130 134 140 144 148 154 164 167 170 170 180 99 102 107 112 116 122 125 130 134 140 144 148 154 169 170 169 170 180 170 180 170 180 170 180 170 180 | 150 | 93 | 92 | 97 | 66 | 102 | 107 | 112 | 116 | 122 | 125 | 130 | 134 | 140 | 144 | 153 | 161 | 170 | 179 |
| 97 99 102 107 112 116 122 125 130 134 140 144 148 154 164 173 181 181 99 102 107 112 116 122 125 130 134 140 144 148 154 165 173 185 173 188 190 201 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 171 179 188 | 200 | 92 | 97 | 66 | 102 | 107 | 112 | 116 | 122 | 125 | 130 | 134 | 140 | 144 | 148 | 158 | 167 | 176 | 186 |
| 99 102 107 112 116 122 126 130 134 140 144 148 154 159 170 170 110 111 114 121 125 130 133 138 142 148 153 157 161 165 173 179 180 201 203 111 114 121 125 130 133 138 142 148 153 157 161 165 173 179 186 197 203 203 121 125 130 133 138 142 148 153 157 161 165 173 179 186 197 207 203 202 208 203 203 203 203 203 203 204 201 203 203 203 203 203 203 203 203 203 203 203 203 203 203 | 250 | 26 | 66 | 102 | 107 | 112 | 116 | 122 | 125 | 130 | 134 | 140 | 144 | 148 | 154 | 164 | 173 | 181 | 191 |
| 111 114 121 125 130 133 138 142 148 153 157 161 165 173 185 192 203 114 121 125 130 133 138 142 148 153 161 165 173 179 186 197 201 208 213 202 203 203 203 203 203 203 203 203 203 203 133 138 142 148 153 157 161 165 173 179 186 193 202 203 | 300 | 66 | 102 | 107 | 112 | 116 | 122 | 125 | 130 | 134 | 140 | 144 | 148 | 154 | 158 | 171 | 179 | 188 | 197 |
| 114 121 125 130 133 138 142 148 153 157 161 165 173 179 180 201 208 121 125 130 133 138 142 148 153 167 161 165 173 179 186 193 204 201 203 125 130 133 138 142 148 153 161 165 173 179 186 193 204 201 203 130 133 138 142 148 153 161 165 173 179 186 193 202 208 203 203 223 242 252 228 235 242 252 233 134 146 179 186 191 200 207 213 220 228 235 240 249 249 249 249 249 249 244 | 320 | 111 | 114 | 121 | 125 | 130 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 185 | 193 | 203 | 211 |
| 121 125 130 133 142 148 153 167 161 165 173 179 186 197 206 213 125 130 133 138 142 148 153 157 161 165 173 179 186 193 202 209 218 227 130 133 138 142 148 153 157 161 165 173 179 186 193 202 208 218 227 133 138 142 148 153 161 165 173 179 186 193 202 208 218 227 228 235 242 252 233 145 186 191 200 207 213 220 228 235 240 258 258 242 258 258 242 258 258 146 147 148 149 200 | 400 | 114 | 121 | 125 | 130 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 179 | 190 | 201 | 208 | 218 |
| 125 130 133 138 142 148 153 157 161 165 173 179 186 193 204 211 219 130 133 138 142 148 153 157 161 165 173 179 186 193 202 209 218 227 133 138 142 148 153 161 165 173 179 186 193 202 208 215 225 233 150 150 164 170 174 179 186 191 200 207 213 220 228 235 240 248 252 235 240 250 252 253 240 250 252 | 450 | 121 | 125 | 130 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 179 | 186 | 197 | 206 | 213 | 225 |
| 133 138 142 148 153 157 161 165 173 179 186 193 202 209 218 227 133 138 142 148 153 157 161 165 173 179 186 193 202 208 215 225 233 150 150 164 157 174 179 186 191 200 207 213 222 228 235 240 282 235 240 262 258 235 240 269 264 258 258 240 258 235 240 250 258 235 240 250 258 240 250 258 235 240 250 258 240 250 258 240 250 250 250 250 250 250 250 250 250 250 250 250 250 250 250 | 200 | 125 | 130 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 179 | 186 | 193 | 204 | 211 | 219 | 228 |
| 133 138 142 148 153 157 161 165 173 179 186 193 202 208 202 208 215 222 223 223 242 252 252 252 252 252 228 235 240 252 <th>220</th> <th>130</th> <th>133</th> <th>138</th> <th>142</th> <th>148</th> <th>153</th> <th>157</th> <th>161</th> <th>165</th> <th>173</th> <th>179</th> <th>186</th> <th>193</th> <th>202</th> <th>209</th> <th>218</th> <th>227</th> <th>236</th> | 220 | 130 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 179 | 186 | 193 | 202 | 209 | 218 | 227 | 236 |
| 150 150 161 164 157 174 179 186 191 200 207 213 222 228 235 240 252 252 156 161 164 170 174 179 186 191 200 207 213 220 228 235 240 240 250 258 161 164 170 174 179 186 191 200 207 213 220 228 235 240 248 254 259 235 240 248 254 259 235 240 248 254 259 265 271 279 284 274 284 205 210 210 210 226 251 252 251 252 252 252 254 254 259 265 271 281 286 296 306 314 323 212 225 | 009 | 133 | 138 | 142 | 148 | 153 | 157 | 161 | 165 | 173 | 179 | 186 | 193 | 202 | 208 | 215 | 225 | 233 | 242 |
| 156 161 164 170 174 179 186 191 200 207 213 220 228 235 240 240 250 264 161 164 170 174 179 186 191 200 207 213 220 228 235 240 248 254 264 274 | 620 | 150 | 156 | 161 | 164 | 157 | 174 | 179 | 186 | 191 | 200 | 207 | 213 | 222 | 228 | 235 | 242 | 252 | 261 |
| 161 164 170 174 179 186 191 200 207 213 220 228 235 240 248 254 264 274 274 164 170 174 179 186 191 200 207 213 220 228 235 240 248 254 264 274 286 296 306 314 323 334 223 229 225 224 259 263 271 279 286 296 306 314 323 334 | 200 | 156 | 161 | 164 | 170 | 174 | 179 | 186 | 191 | 200 | 207 | 213 | 220 | 228 | 235 | 240 | 250 | 258 | 267 |
| 164 170 174 179 186 191 200 207 213 220 228 235 240 249 254 264 274 274 173 179 186 191 197 204 210 216 223 228 235 240 248 254 259 265 271 279 287 287 284 284 284 289 286 286 306 314 323 223 223 224 259 263 261 267 274 289 296 306 314 323 223 224 254 259 263 284 289 296 306 314 323 334 | 750 | 161 | 164 | 170 | 174 | 179 | 186 | 191 | 200 | 207 | 213 | 220 | 228 | 235 | 240 | 248 | 256 | 264 | 274 |
| 173179186191197204210216223228235240248254259265271279287296306314323205210216225226226261267274281286296306314323223223235240248254259263271279284289296306314323334 | 800 | 164 | 170 | 174 | 179 | 186 | 191 | 200 | 207 | 213 | 220 | 228 | 235 | 240 | 249 | 254 | 264 | 274 | 284 |
| 205216216223229235240248254254259265271279287289280306314323212213223235234254259263271279284289296306314323334 | 900 | 173 | 179 | 186 | 191 | 197 | 204 | 210 | 216 | 223 | 228 | 235 | 240 | 248 | 254 | 264 | 274 | 284 | 292 |
| 212 218 225 232 237 242 250 255 261 267 274 284 286 296 306 314 323 223 223 235 240 248 254 259 263 271 279 284 289 296 306 314 323 334 | 1000 | 205 | 210 | 216 | 223 | 229 | 235 | 240 | 248 | 254 | 259 | 265 | 271 | 279 | 287 | 296 | 306 | 314 | 323 |
| 223 229 235 240 248 254 259 263 271 279 284 289 296 306 314 323 334 | 1100 | 212 | 218 | 225 | 232 | 237 | 242 | 250 | 255 | 261 | 267 | 274 | 281 | 286 | 296 | 306 | 314 | 323 | 334 |
| | 1200 | 223 | 229 | 235 | 240 | 248 | 254 | 259 | 263 | 271 | 279 | 284 | 289 | 296 | 306 | 314 | 323 | 334 | 344 |



FIRE DAMPERS - CAPPED VERTICAL

FDCVT

FIRE DAMPER: CAPPED, VERTICAL, TEST LATCH

MIDIT

| 1200 | 173 | 184 | 192 | 204 | 212 | 223 | 233 | 241 | 253 | 261 | 271 | 282 | 290 | 302 | 321 | 341 | 352 | 361 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1100 | 162 | 171 | 180 | 189 | 200 | 209 | 218 | 229 | 238 | 249 | 258 | 267 | 279 | 282 | 302 | 321 | 341 | 352 |
| 1000 | 150 | 160 | 168 | 177 | 186 | 193 | 204 | 211 | 219 | 229 | 237 | 245 | 255 | 263 | 282 | 302 | 321 | 341 |
| 006 | 140 | 147 | 157 | 164 | 172 | 181 | 189 | 197 | 206 | 213 | 223 | 232 | 239 | 249 | 263 | 282 | 302 | 321 |
| 800 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 203 | 210 | 218 | 228 | 236 | 249 | 263 | 287 | 302 |
| 750 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 203 | 210 | 218 | 228 | 239 | 255 | 279 | 290 |
| 200 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 203 | 210 | 218 | 232 | 245 | 267 | 282 |
| 650 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 203 | 210 | 223 | 237 | 258 | 271 |
| 009 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 203 | 213 | 229 | 249 | 261 |
| 220 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 192 | 206 | 219 | 238 | 253 |
| 200 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 185 | 197 | 211 | 229 | 241 |
| 450 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 176 | 189 | 204 | 218 | 233 |
| 400 | 82 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 167 | 181 | 193 | 209 | 223 |
| 350 | 79 | 85 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 160 | 172 | 186 | 200 | 212 |
| 300 | 74 | 62 | 85 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 150 | 164 | 178 | 189 | 204 |
| 250 | 20 | 74 | 62 | 85 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 144 | 157 | 168 | 180 | 192 |
| 200 | 29 | 20 | 74 | 62 | 85 | 90 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 137 | 147 | 160 | 171 | 184 |
| 150 | 64 | 29 | 20 | 74 | 62 | 85 | 06 | 92 | 100 | 109 | 113 | 119 | 124 | 131 | 140 | 150 | 162 | 173 |
| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 220 | 009 | 650 | 700 | 750 | 800 | 900 | 1000 | 1100 | 1200 |



FIRE DAMPERS - CAPPED HORIZONTAL

FDCHTFIRE DAMPER: CAPPED, HORIZONTAL, TEST LATCH

| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 550 | 009 | 650 | 200 | 750 | 800 | 900 | 1000 | 1100 | 1200 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 150 | 97 | 66 | 102 | 107 | 112 | 118 | 123 | 127 | 133 | 141 | 146 | 153 | 157 | 163 | 173 | 184 | 194 | 206 |
| 200 | 66 | 102 | 107 | 112 | 118 | 123 | 127 | 133 | 141 | 146 | 153 | 157 | 163 | 170 | 180 | 192 | 204 | 216 |
| 250 | 102 | 107 | 112 | 118 | 123 | 127 | 133 | 141 | 146 | 153 | 157 | 163 | 170 | 177 | 189 | 202 | 212 | 226 |
| 300 | 107 | 112 | 118 | 123 | 127 | 133 | 141 | 146 | 153 | 157 | 163 | 170 | 177 | 184 | 197 | 210 | 223 | 236 |
| 350 | 121 | 126 | 131 | 136 | 141 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 212 | 227 | 239 | 254 |
| 400 | 126 | 131 | 136 | 141 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 208 | 223 | 235 | 251 | 263 |
| 450 | 131 | 136 | 141 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 208 | 216 | 230 | 243 | 259 | 274 |
| 200 | 136 | 141 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 208 | 216 | 226 | 238 | 253 | 270 | 283 |
| 220 | 141 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 208 | 216 | 226 | 234 | 248 | 260 | 280 | 293 |
| 009 | 149 | 155 | 160 | 164 | 172 | 178 | 185 | 191 | 202 | 208 | 216 | 226 | 234 | 242 | 255 | 270 | 288 | 303 |
| 650 | 167 | 173 | 178 | 185 | 190 | 197 | 205 | 213 | 220 | 229 | 238 | 248 | 256 | 264 | 276 | 290 | 312 | 324 |
| 200 | 173 | 178 | 185 | 190 | 197 | 202 | 213 | 220 | 229 | 238 | 248 | 256 | 264 | 272 | 285 | 300 | 321 | 335 |
| 750 | 178 | 185 | 190 | 197 | 205 | 213 | 220 | 229 | 238 | 248 | 256 | 264 | 272 | 282 | 293 | 308 | 332 | 345 |
| 800 | 185 | 190 | 197 | 205 | 213 | 220 | 229 | 238 | 248 | 256 | 264 | 272 | 282 | 289 | 302 | 317 | 335 | 355 |
| 006 | 193 | 202 | 210 | 218 | 226 | 235 | 242 | 252 | 259 | 267 | 276 | 285 | 293 | 302 | 317 | 335 | 378 | 375 |
| 1000 | 227 | 236 | 243 | 254 | 261 | 270 | 280 | 287 | 296 | 305 | 313 | 321 | 331 | 339 | 357 | 378 | 397 | 417 |
| 1100 | 238 | 248 | 256 | 265 | 275 | 285 | 295 | 305 | 314 | 323 | 334 | 344 | 354 | 364 | 378 | 397 | 417 | 427 |
| 1200 | 250 | 259 | 269 | 280 | 288 | 298 | 308 | 318 | 329 | 337 | 347 | 357 | 367 | 378 | 397 | 417 | 427 | 438 |
| | | | | | | | | | | | | | | | | | | |



FIRE DAMPERS - SQUARE VERTICAL

FDSVT FIRE DAMPER: SQUARE, VERTICAL, TEST LATCH

| 006 | 213 | 227 | 253 | 279 | 287 | 262 | 312 | 361 | 376 | 402 | 417 | 435 | 449 | 464 | 484 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 800 | 203 | 213 | 227 | 265 | 279 | 287 | 262 | 341 | 361 | 928 | 402 | 417 | 435 | 449 | 464 |
| 750 | 182 | 203 | 213 | 255 | 265 | 279 | 287 | 328 | 341 | 361 | 376 | 402 | 417 | 435 | 449 |
| 700 | 174 | 182 | 203 | 242 | 255 | 265 | 279 | 312 | 328 | 341 | 361 | 376 | 402 | 417 | 435 |
| 650 | 167 | 174 | 182 | 235 | 240 | 242 | 265 | 295 | 312 | 328 | 341 | 361 | 376 | 402 | 417 |
| 009 | 160 | 167 | 174 | 224 | 232 | 235 | 242 | 279 | 295 | 312 | 328 | 341 | 361 | 376 | 402 |
| 550 | 154 | 160 | 167 | 211 | 216 | 224 | 235 | 267 | 279 | 295 | 312 | 328 | 341 | 361 | 376 |
| 200 | 145 | 154 | 160 | 203 | 209 | 216 | 224 | 259 | 267 | 279 | 295 | 312 | 328 | 341 | 361 |
| 450 | 136 | 145 | 154 | 191 | 203 | 209 | 216 | 249 | 259 | 267 | 279 | 295 | 312 | 328 | 341 |
| 400 | 129 | 136 | 145 | 185 | 191 | 203 | 209 | 242 | 249 | 259 | 267 | 279 | 295 | 312 | 328 |
| 350 | 121 | 129 | 136 | 168 | 185 | 191 | 203 | 227 | 240 | 249 | 259 | 267 | 279 | 295 | 312 |
| 300 | 113 | 121 | 129 | 156 | 168 | 174 | 191 | 213 | 227 | 240 | 249 | 259 | 267 | 279 | 295 |
| 250 | 106 | 113 | 121 | 147 | 156 | 164 | 174 | 205 | 213 | 227 | 240 | 249 | 259 | 267 | 279 |
| 200 | 96 | 106 | 113 | 136 | 147 | 154 | 164 | 187 | 205 | 213 | 227 | 240 | 249 | 259 | 267 |
| 150 | 92 | 96 | 106 | 124 | 136 | 142 | 154 | 172 | 187 | 202 | 213 | 227 | 240 | 249 | 259 |
| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 220 | 009 | 650 | 200 | 750 | 800 | 006 |

FDSHT FIRE DAMPER: SQUARE, HORIZONTAL, TEST LATCH

| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 009 | 6 20 | 700 | 750 | 800 | 900 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|
| 150 | 124 | 129 | 138 | 146 | 154 | 161 | 168 | 178 | 186 | 192 | 201 | 207 | 215 | 235 | 248 |
| 200 | 129 | 138 | 146 | 154 | 161 | 168 | 178 | 186 | 192 | 201 | 207 | 215 | 235 | 248 | 259 |
| 250 | 138 | 146 | 154 | 161 | 168 | 178 | 186 | 192 | 201 | 207 | 215 | 235 | 248 | 259 | 285 |
| 300 | 157 | 168 | 180 | 188 | 202 | 217 | 225 | 235 | 243 | 256 | 267 | 276 | 287 | 298 | 311 |
| 350 | 177 | 188 | 196 | 209 | 226 | 233 | 242 | 251 | 257 | 272 | 282 | 296 | 306 | 319 | 329 |
| 400 | 184 | 193 | 206 | 215 | 233 | 242 | 251 | 257 | 264 | 276 | 284 | 306 | 319 | 329 | 337 |
| 450 | 193 | 206 | 215 | 233 | 242 | 251 | 257 | 264 | 276 | 284 | 908 | 319 | 329 | 337 | 353 |
| 500 | 212 | 228 | 245 | 255 | 267 | 284 | 288 | 301 | 308 | 319 | 335 | 353 | 368 | 382 | 401 |
| 550 | 228 | 245 | 255 | 267 | 284 | 288 | 301 | 308 | 319 | 332 | 353 | 368 | 382 | 401 | 417 |
| 009 | 245 | 255 | 267 | 284 | 288 | 301 | 308 | 319 | 332 | 353 | 368 | 382 | 401 | 417 | 444 |
| 650 | 267 | 281 | 295 | 302 | 313 | 321 | 332 | 348 | 998 | 381 | 362 | 415 | 430 | 458 | 471 |
| 700 | 281 | 295 | 302 | 313 | 321 | 332 | 348 | 366 | 381 | 362 | 415 | 430 | 458 | 471 | 489 |
| 750 | 295 | 302 | 313 | 321 | 332 | 348 | 366 | 381 | 368 | 415 | 430 | 458 | 471 | 489 | 504 |
| 800 | 302 | 313 | 321 | 332 | 348 | 366 | 381 | 395 | 415 | 430 | 458 | 471 | 489 | 504 | 518 |
| 900 | 313 | 321 | 332 | 348 | 366 | 381 | 395 | 415 | 430 | 458 | 471 | 489 | 504 | 518 | 538 |
| | | | | | | | | | | | | | | | |



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FDRVT / FDRHT

FIRE DAMPER: ROUND, VERTICAL / HORIZONTAL, TEST LATCH

| mm | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 200 | 220 | 009 | 650 | 200 | 150 | 800 | 900 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| VERTICAL | 92 | 104 | 122 | 149 | 180 | 207 | 235 | 285 | 312 | 341 | 388 | 423 | 462 | 498 | 551 |
| HORIZONTAL | 123 | 138 | 157 | 185 | 224 | 251 | 279 | 329 | 355 | 384 | 430 | 480 | 520 | 556 | 209 |
| | | | | | | | | | | | | | | | |



JENSEN METAL PRODUCTS (NZ) LIMITED

APPLICATION FOR CREDIT ACCOUNT

| ACCO | UNT NAME | |
|-------|--|---|
| POST | AL ADDRESS | |
| | | |
| | | MOBILE |
| | L ADDRESS | |
| MAIN | BUSINESS ACTIVITY | |
| CONT | ACT NAME | POSITION |
| CRED | IT AMOUNT REQUIRED \$ | ORDER NO. USED YES / NO |
| | CREDIT F | REFERENCES (3 REQUIRED) |
| COMP | PANY | PHONE |
| COMP | PANY | PHONE |
| СОМР | ANY | PHONE |
| BANK | | BRANCH |
| | LIST DIRECTO | RS / PRINCIPLES OF COMPANY |
| | - | PAID UP CAPITAL \$ |
| 1) | WE AGREE TO ABIDE BY JENSEI DETAILED ON THE REVERSE OF | N METAL PRODUCTS (NZ) LTD CONDITIONS OF SALE AS THIS APPLICATION FORM. |
| 2) | WE AGREE THAT CREDIT REFER PROCESSING THIS APPLICATION | RENCES MAY BE APPROACHED IN ORDER TO ASSIST IN N. |
| 3) | WE DO / DO NOT AGREE TO JEN INFORMATION IF REQUESTED TO | SEN METAL PRODUCTS (NZ) LTD RELEASING CREDIT D DO SO BY A THIRD PARTY. |
| NOTE: | | WILL INCUR AUTOMATIC CANCELLATION OF CREDIT AND NO ED UNTIL OVERDUE AMOUNT IS RECEIVED. |
| | PLEASE SIGN THIS APPLIC | CATION, INITIAL THE REVERSE AND RETURN. |
| SIGNE | D | POSITION |
| PRINT | NAME | DATE |
| | PHONE: 09 634 3 | STREET, ONEHUNGA 116, FACSIMILE: 09 636 4602 NROSE, AUCKLAND, NEW ZEALAND |

STANDARD CONDITIONS OF SALE JENSEN METAL PRODUCTS LIMITED

1. Definitions

In these conditions

"The Quotation" - means the quotation on the terms and conditions as set out below for the supply of goods set out in the First Schedule.

"The Contract" - means the contract arising out of acceptance by the Customer of the Quotation.

"The Customer" - means the Customer referred to in the Quotation.

"The Supplier" - means the Supplier referred to in the Quotation.

"The Goods" - means the whole or any part of the goods specified in the Quotation.

"The Premises" - means the premises specified in the Quotation.

"The Price" - means the total price of the goods and the works as set out in the Quotation.

"The Work" - means the whole or part of the work and performance of services described in the Quotation.

2. The Goods to be Supplied

The Supplier will supply the goods to the Customer and will deliver the goods to the place where specified for delivery in the Quotation and in accordance with the terms of the Contract.

Installation

Unless specified in the quotation the Supplier shall not be responsible for installation of the goods and shall not be responsible for any damage whatsoever to any goods or any other thing whatsoever caused by installation of the goods.

4. Payment

In consideration of the Supplier supplying the goods to the Customer, the Customer will pay to the Supplier the price which shall be paid in the following manner:

- The deposit if referred to in the Quotation, will be paid by the Customer to the Supplier upon the Customer accepting the Quotation, time being of the essence; and
- The balance of the price shall be paid by the Customer to the Supplier in accordance with clause 7 herein.

Variations and Measurements

Where the price is based on measurements, descriptions or other facts furnished to the Supplier by the Custom er, then if any of those measurements descriptions or facts prove to be inaccurate the Supplier may make such increase or decrease in the price as the Supplier deems necessary because of such inaccuracy

The Supplier will use its best endeavours to deliver the goods to the Customer on the expected date of delivery specified in the Quotation but the Supplier shall be under no liability to the Customer should performance or continued performance by the Supplier of the Contract be wholly or partly delayed or prevented by the Supplier's inability to procure materials, due to any act of God, war, strike, lockout, fire or any other matter beyond the Supplier's control.

Conditions as to Payment

- Payment for the goods shall be made by the Customer in full on the 20th of the month following delivery. If the Customer makes default in payment, commits any act of bankruptcy or (where the Customer is a company) if the Customer is wound up either voluntarily or by order of the Court or if a receiver or manager of the Customer is appointed, the Supplier may at any time without notice to the Customer, suspend or terminate the Contract. Ownership of the goods will remain with the Supplier until the price has been paid in full by the Customer.
- 7.2 The Customer will make all payments due to the Supplier whether in respect of the purchase price or for any other reason in full without deductions of any nature whatsoever whether by way of set off, counter claim or other equitable or lawful claim or otherwise howsoever
- Any discounts offered will be forfeited on any account not paid by due date

Interest on Outstanding Price

If the Customer fails to make any payment due to the Supplier by the due date for payment the Customer shall pay to the Supplier default interest on that amount at a rate 4% above the current overdraft rate charged by the Supplier's bank at the due date, for the period during which it remains unpaid which interest accrues on a daily basis before as well as after judgment. The Customer is also liable to pay all expenses and legal costs of the Supplier (calculated as between solicitor and own client) in relation to the recovery of all payments then due. This provision is not a waiver of the Customer's default and the interest rate is not an extension of credit to the Customer but is a genuine pre-estimate of the Supplier's loss caused by the Customer's failure to pay on the due

9. Delay in Acceptance by the Customer

Notwithstanding Clause 4 if the Customer is for any reason unable to accept delivery of the goods beyond fourteen (14) days after the expected date of delivery specified in the Quotation the Customer shall pay to the Supplier a sum of money which, together with any deposit which may have been requested, equals 50% of the price. If the Customer does not increase the deposit as above, or is for any reason unable or unwilling to accept delivery of the goods beyond three (3) months after the expected date of delivery specified in the Quotation the Supplier may terminate the contract which shall then be deemed to be at an end. In the event of such determination the Supplier may at its option resell the goods and retain the deposit in accordance with Clause 10.

10. Termination After Acceptance of Quotation

If the Contract is terminated by the Customer after production has commenced or by the Supplier pursuant to Clause 9 then the Supplier may retain the deposit in full.

11. Componentry Price Fluctuations

The Customer acknowledges that items purchased on behalf of the Customer such as fans, grilles and filters, etc will be subject to price fluctuations which are beyond the control of the Supplier. Wherever possible any price fluctuation for these items will be notified to the Customer and the price shall be varied accordingly

12. Work Not Included in the Quotation

Unless specifically set forth in the Quotation the work does not include any plumbing, electrical, painting or other construction work

13. Agreement in Writing

The Customer and the Supplier agree that this contract and the Quotation constitute the whole of the agreement between the parties and that there are no collateral agreements between the parties relating to the subject matter of the Contract. The Customer acknowledges that he/she was not induced to enter in the Contract by any representation made by or on behalf of the Supplier or any of its employees as to the suitability of the goods or as to any other matter or thing

- The Supplier warrants the goods which it manufactures against faulty workmanship and/or materials for a period of one (1) year after delivery.
- This warranty will not apply if the goods are repaired by any person not authorised by the Supplier to do
- such repairs or if the goods are used other than for the purpose for which they were intended. This warranty only applies to goods manufactured by the Supplier. Any parts components or materials obtained by the Supplier from other sources are not covered by this warranty. Such parts components or materials shall be covered by the manufacturer's warranty (if any) only.
- This warranty is exclusive and all other warranties descriptions representations or conditions as to fitness or suitability for any purpose, tolerance to any condition, merchantability or otherwise whether in a like

nature or not and whether expressed or implied by law, trade, customer or otherwise are expressly excluded.

15. Supplier's Liability

The Supplier's liability for defective goods and loss caused by defective goods is limited to, at the Supplier's option. either:

- Replacing, at the premises, any goods which the Customer is entitled to reject pursuant to Clause 16; or
- Refunding the sale price of those goods rejected.
- The Supplier shall not be liable for any consequential loss arising from any defect in materials, workmanship or installation.

16. Notification of Claims

No claim based on defective goods will be allowed and no rejection of the goods will be allowed unless:

- The claim is notified to the Supplier within seven (7) days of the defect becoming apparent from a reasonable inspection of the goods. Where possible the Customer or his appointed agent shall inspect and accept the goods ex-factory prior to delivery.
- The Supplier is given a reasonable opportunity to investigate the claim.

17. Shortages in Quantity

The Supplier will not be liable for shortages in quantity of the goods unless:

- The claim is notified to the Supplier within seven (7) days of receipt of the goods by the Customer: and
- The Supplier is given a reasonable opportunity to investigate the claim.

18. Damage in Transit

- In the event that the Supplier agrees in its quotation to supply "free into the buyer's premises" delivery shall be deemed complete when the goods are transported to the Customer's premises or to the place agreed by the Supplier in its quotation.
- In the event that the Supplier agrees in its quotation to supply "ex-works the Supplier" delivery shall be deemed complete when the Supplier has placed the goods at the disposal of the Customer, or delivered the goods into the possession of the freight company transporting the goods on behalf of the Customer. The Supplier may agree to arrange freight and/or insurance as agents for and on behalf of the Customer. All such costs of freight and/or insurance shall be the exclusive responsibility of the Customer and all sums paid by the Supplier shall be repaid by the Customer to the Supplier immediately upon being invoiced for them. No agreement to arrange freight on behalf of the Customer shall be deemed to change in any manner the ex-works nature of the sale.
- The Supplier shall not be liable for any damage resulting from transportation of the goods unless the Supplier is notified of such damage within twenty-four (24) hours of receipt of the goods

Retention of Title

- Property in any goods delivered by the Supplier to the Customer shall not pass (and the Customer shall be a bailee only in respect of such goods) until such a time as the Customer has paid to the Supplier the full price of such goods together with the full price of any other goods purchased from it by the Customer. Until such time as the Customer becomes the owner of the goods he will store them on his premises separately from his own goods or those of any other person and in a manner which makes them readily identifiable as the Supplier's goods.
- The Customer's rights to possession of the goods shall cease if he fails to comply strictly with these conditions or if the Customer (not being a company), commits an available act of bankruptcy or if the Customer (being a company), does anything or fails to do anything which would entitle a receiver to take possession of any of its assets or which would entitle any person to present a petition for winding up or if the Customer goes into liquidation or if the Customer breaches the terms of any mortgage over the premises
- Subject to the terms hereof, the Customer may incorporate the goods in or with any other property (the property resulting from such incorporation being hereinafter described as "the new property") but subject to the following express conditions:
 - In the case of incorporation with or fixture to any property of the Customer the new property shall on such incorporation or fixture become and/or be deemed to be owned separately by the Customer and the Supplier in such shares as the value of the goods and the value of the Customer's property into which the goods have been incorporated or affixed bears to the value of the new property.
 - If the Supplier's goods are incorporated with or fixed to property owned by any other person or persons (other than the Customer) or are processed with or incorporated therein, the new property shall become or shall be deemed to be owned in common with that other person or persons. The new property shall be owned in common in such shares as the value of the inputs by the Supplier and the value of that other person or persons property into which the goods have been incorporated or affixed bear to the total value of the new property.
- The Customer may agree to sell on the Supplier's goods but on the express condition that such an agreement to sell shall take place as agents and bailees for the Supplier whether the Customer sells on its own accord or not and that the entire proceeds thereof are held in trust for the Supplier and are not mingled with any other moneys and shall at all times be identifiable as the Supplier's moneys.

 (i) If the Customer has not received the proceeds of any such sale he will, if called so to do by the
 - Supplier within seven (7) days thereof assign to the Supplier all rights against the person or persons to whom he has supplied the Supplier's goods.
- The Customer may agree to sell on the new property but on the express condition that as between the Customer and Supplier such an agreement to sell shall take place as agents and bailees for the Supplier whether the Customer sells on its own accord or not and that the entire proceeds thereof are held in trust for the Supplier and for any other person having an interest in the new property in the same shares in which the new property was owned and are not mingled with any other moneys and shall at all times be identifiable as moneys held under this clause.
- If the Customer has not received the proceeds of any sale of the new property he will, if called so to do by the Supplier, within seven days thereof assign to the Supplier all rights against the person or persons to whom he has supplied the new property.
- Prior to the Customer acquiring property in any goods the Supplier or its representatives agents or servants may at any time enter upon the Customer's land or premises where it believes such goods may be to view and inspect the same and/or repossess them if the Customer's right to possession of the goods has ceased. Such right of repossession shall continue notwithstanding incorporation or affixing of the goods to or with other property.
- In the event of such repossession the Customer irrevocably authorises the Supplier and/or its agents to enter any of its premises of the Customer using such reasonable force as is necessary. The Customer agrees to indemnify the Supplier and its agents for any liability arising from any act of trespass committed by such entry

20. Risk and Insurance

Notwithstanding that property in any goods may remain with the Supplier all risk in respect of the goods passes to the Customer upon delivery. Upon delivery of the goods the Customer will insure and keep insured the goods for their full insurable value.