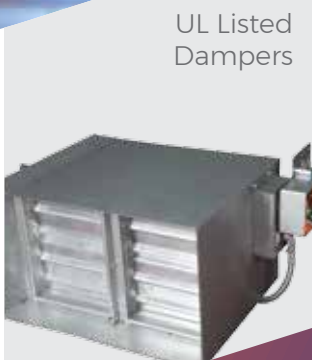


# Delivering with agility for a dynamic industry

Safer, greener, innovative solutions  
in the fast evolving HVAC industry



Fire-rated  
Duct System



UL Listed  
Dampers



Dampers



Louvers



Sound  
Attenuators

**PRODUCT CATALOGUE**



Central Ventilation Systems (CVS) is a key manufacturer of air movement and fire-safety products. Over a decade of serving in the HVAC industry, the company works with a spirit of teamwork in achieving the various performance objectives of the consultants and building contractors.

With focus on quality, safety and sustainability, CVS has successfully partnered in over 300 projects of varied sizes and complexities, providing highest rated and certified HVAC products and solutions.

- Complying with international standards such as UL, BS, EN, ASTM, ANSI, SMACNA, AMCA, DW144 and ISO
- Delivering on performance parameters for multi-building complexes, hospitals, malls and universities
- Rich understanding of the various nuances of executing projects seamlessly in the HVAC industry
- Assurance of prompt customer service and technical support



Over a decade  
of serving in the  
HVAC industry  
with fire-safety  
solutions





## Key advantages that make a real impact

1

**Fire-safety products tested, approved and certified** by renowned labs and local civil defence authority

2

**High quality in-house manufacturing** ensuring consistency and timeliness with process automation

3

**Saving time and hassle** through understanding of region's building standards, local regulations and numerous specifications



High quality  
delivered with  
honesty and  
integrity



## Vision

To be recognized as a leading player within the HVAC industry having formidable presence across product categories.



## Mission

Striving for superior quality and performance while manufacturing sustainable products. Associate with leading projects that are shaping the infrastructure landscape.



## Core Attributes

- Striving for excellence
- Achieving technical superiority
- Commitment to customer satisfaction
- Conscious of environment and costs
- Investing in innovative methodologies

Our Certifications



ISO 9001:2008  
certified manufacturer

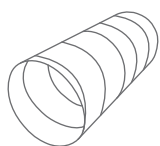


Associations



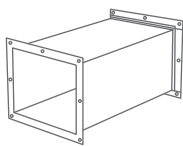
# Contents

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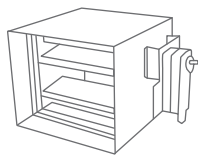
## Ductwork 07

Rectangular Ductwork  
Spiral & Round Seamed  
Ductwork



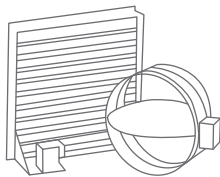
## Fire-rated Ductwork 09

BS: Fire-rated Ductwork  
EN: Fire-rated Ductwork



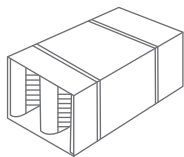
## UL Listed Dampers 13

Fire Dampers  
Smoke Dampers  
Ceiling Dampers  
Combination Fire &  
Smoke Dampers



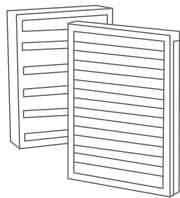
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Rectangular Dampers  
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## Sound Attenuators 27

Rectangular Attenuators  
Round Attenuators



## Louvers 29

Fixed Louvers  
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Wind-driven Rain Louvers  
Adjustable Louvers  
Combination Louver/Damper  
Sand Trap Louvers



### Fire-rated Duct System

- Non-coated fire rated duct system (complies with BS476 Part 24:1987 Type A & Type B)
- Approved by local civil defence authorities
- ISO6944 compliant
- Insulated and uninsulated systems

### Extensive Range of Fire Products

- Non-coated fire-rated duct system to meet the new EN requirements including Type C smoke extract ductwork
- UL listed dampers: Curtain fire dampers, smoke dampers, combination of fire and smoke dampers and ceiling dampers listed to UL555 & UL555S
- Approved by local civil defence authorities

**PYRO**  
**SAFE**



### Sound Attenuators for HVAC Noise Control

- Rectangular & circular sound attenuators designed to meet all HVAC noise control applications
- Product key features: Low pressure drop, high flow rate, high quality acoustic infill
- Tested to ASTM E477-06 standard

### Dampers

- Diverse range of control dampers in rectangular and true-round series
- High performance backdraft dampers, relief dampers
- Heavy duty industrial dampers – round & rectangular
- Manufactured to requirements of AMCA

**KOMPONET**  
DAMPER SERIES



### Louvers

- Wide range of louvers such as fixed louvers, equipment screens and architectural louvers
- Range of high performance wind-driven rain louvers, combination louvers/dampers
- Acoustic louvers and barriers
- High performance sand trap louvers
- Available in variety of models, sizes and RAL finishes

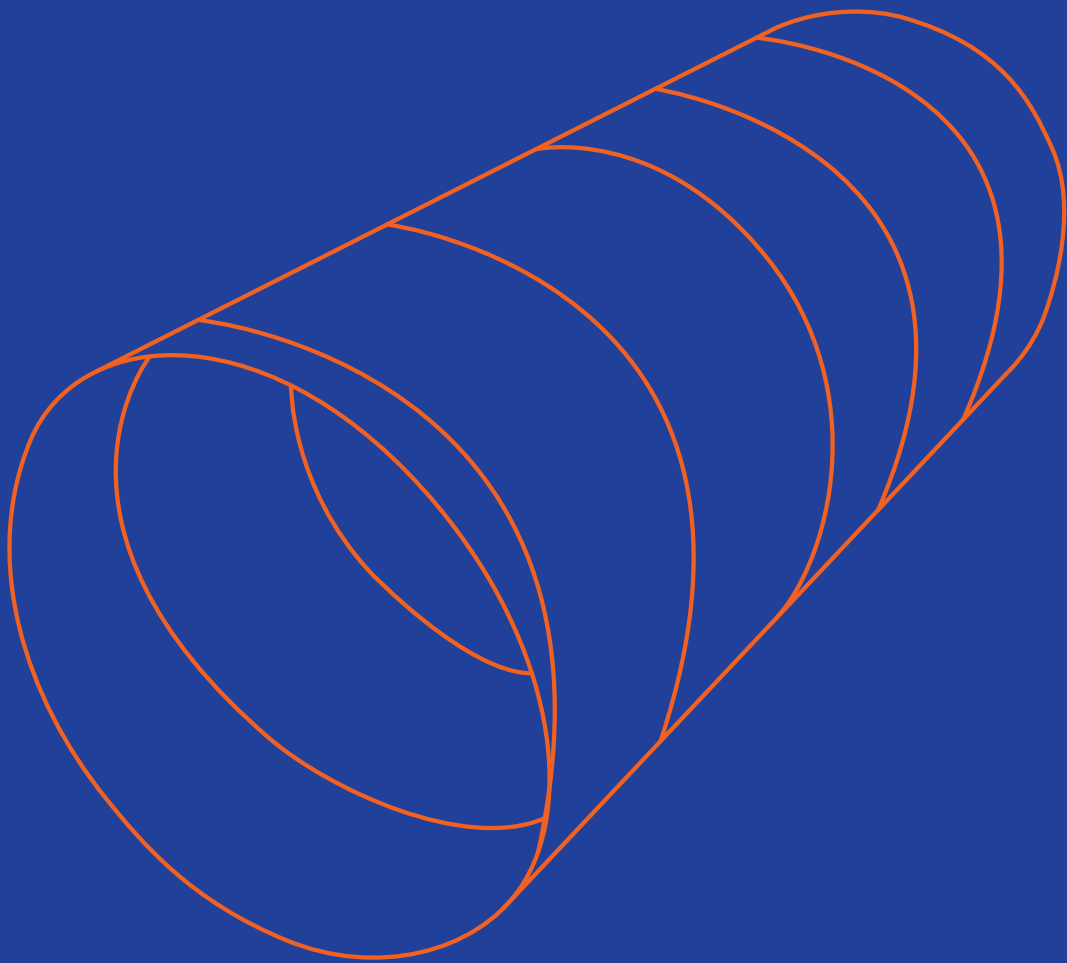


# Ductwork

Rectangular Ductwork

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Spiral & Round Seamed Ductwork



## Rectangular Ductwork



Rectangular ducts are manufactured to meet the most stringent HVAC/Industrial specifications and quality standards. Rectangular GI Ducts are fabricated out of hot dipped galvanized steel sheet of lock forming quality as standard duct material. All types of duct accessories including flanges, raw ends and airtight clamps are also available.

- Duct construction as per DWI44 / SMACNA / ASHRAE standards provides superior strength, low leakage rate and vibration free products.
- CVS Duct is fully equipped to provide customized ductwork with various materials like galvanized steel, stainless steel, aluminum and carbon steel to suit specific project requirements.
- Ducts will be tailor-made in size as per the requirement of the project. No limitation on duct size. Any size of duct can be constructed (3Mtr and above ducts are constructed in multi panels).
- Fully Welded Industrial Grade Heavy Gauge Ductwork for Commercial Kitchens, Marine and Oil & Gas Applications with various anti corrosion, abrasive handling coatings are also available.
- Welded systems in Carbon Steel and Stainless Steel in various thicknesses and specifications are available to meet various requirements and custom specifications.

## Spiral & Round Seamed Ductwork



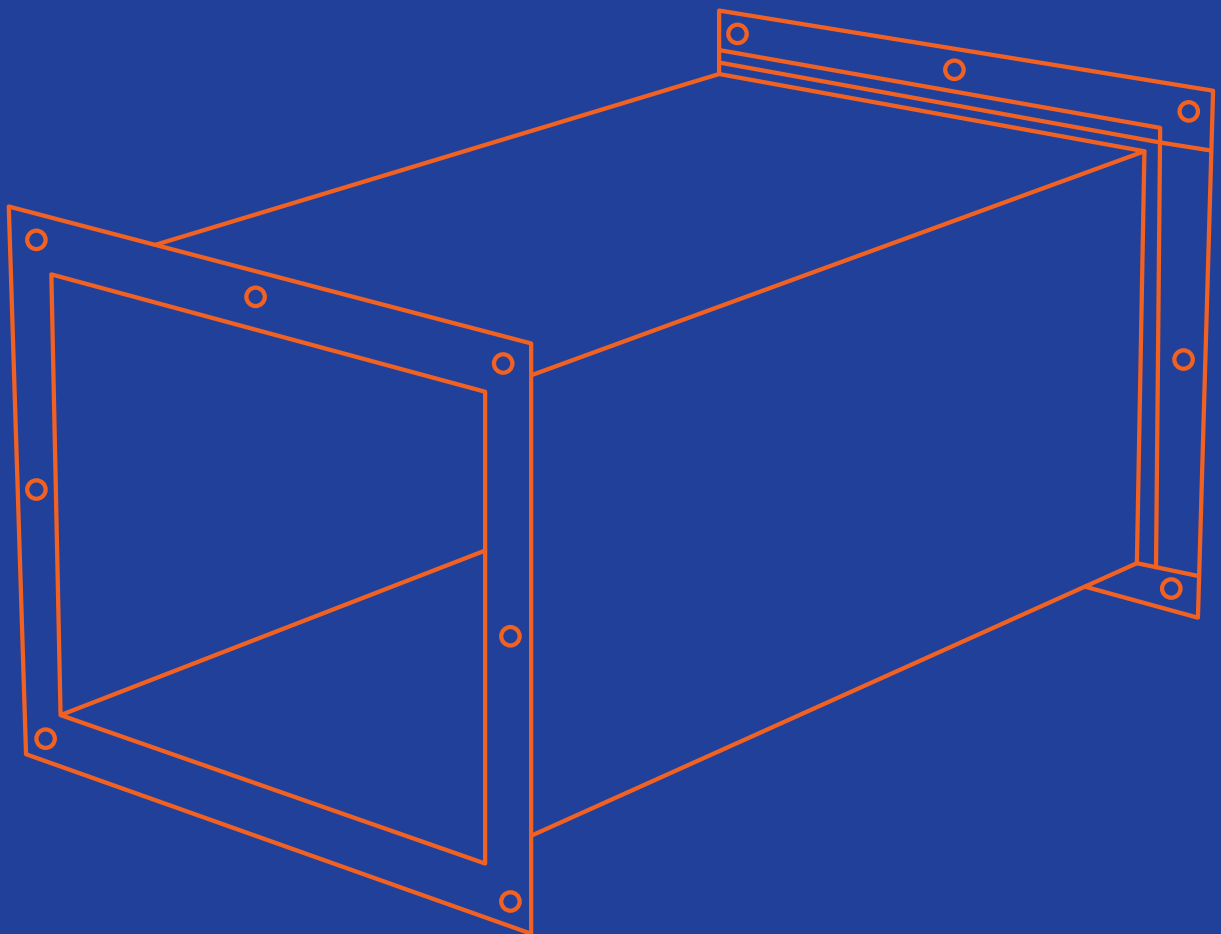
Round ductwork where used has advantages of faster installation, lower costs, lower leakages, lower pressure drops and better operations. Spiral wound ductwork and fittings made to known industry standards are exceeding used on large scale projects for their particularly low leakages and self-sealing mechanisms. Round and spiral ductwork are manufactured in standard Lock forming quality Galvanized steel for ventilation ductwork and Aluminum and Stainless Steel ductwork are also available for exposed applications and cladding systems.

- Duct construction as per DWI44 / SMACNA / ASHRAE standards provides superior strength, low leakage rate and vibration free products
- Spiral duct diameter varies from min of 125mm to max of 3000mm
- Individual pipe lengths available upon request and also available in aluminum and stainless steel
- Seamed pipes are made in standard lengths of 1220mm and Spiral pipes can be produced in up to 6000mm of lengths
- Pipes can be made in up to 12g Aluminum, 14g Galvanized Steel and 16g Stainless Steel

# Fire-rated Ductwork

BS: Fire-rated Ductwork

EN: Fire-rated Ductwork





### 4 HOURS FIRE-RATED DUCT

- Non-coated
- Light weight
- Quick turnaround time
- 4 hour stability & integrity
- Up to 3 hours insulation
- Fully certified to BS 476 part 24 by Exova Warrington-fire
- Type A and Type B approved
- Available in round, rectangular and oval (rectangular up to 8 X 6 MTRs and round upto 1500mm dia)
- All system components certified: dampers, silencers and access panels

### Most highly accredited passive fire protection system in the market

Designed to meet the most stringent fire safety requirements in the building industry, the fire-rated duct system has been comprehensively tested by Exova Warrington-fire research department, achieving 245 minutes - the highest fire rating achieved by a ventilation duct.

Besides the internationally recognized testing and certifications, the range is approved by Civil Defence authorities in Abu Dhabi, Dubai and Sharjah. Strictest procedures in manufacturing, installation and inspection are adhered to and certification is provided by trained inspectors on completion of the project.

### SAFE 4 i - up to 3 hours insulation

The ductwork offers insulation of up to three hours at 1200° C in applications where an insulation criteria is required. Thickness and density is calculated by the type of system and time period required.

High quality insulation

Light weight insulation

No resin binders or glue systems required



Approved by Civil Defence

• Abu Dhabi • Dubai • Sharjah



**PYRO  
SAFE**

### 4 HOURS FIRE-RATED DUCT

- First EN certified system in the middle-east
- Non-coated
- Light weight
- 4 hours integrity and stability
- Up to 3 hours insulation
- Firas accredited
- Fully certified to EN 1366 PART 1 fire duct, kitchen extract & pressurisation, EN 1366 PART 8 multi compartment smoke extract and EN 1366 PART 9 single compartment smoke extract

### Understanding the new EN regulations

PYRO SAFE fire rated ductwork is produced in an ISO9001 quality control management environment, and has been developed aligning with the European Standard EN 12101-7 for smoke extract and EN 15871 for fire ductwork, kitchen extract and pressurisation. All PYRO SAFE products have been tested to the latest EN standards.

#### PERFORMANCE CRITERIA

**Integrity:** Complete smoke management system based on the performance of all elements from penetration seals to smoke leakage and to cross sectional area.

#### Stability

- Leakage is set to different parameters for smoke extract and fire rated duct
- Smoke extract is tested to a maximum of 10m<sup>3</sup>/hr/m<sup>2</sup> and a low of 5m<sup>3</sup>/hr/m<sup>2</sup>
- Fire duct is tested at a higher rate to a maximum of 15m<sup>3</sup>/hr/m<sup>2</sup> and a low of less than 10m<sup>3</sup>/hr/m<sup>2</sup>
- PYRO SAFE received a classification of "S" in both tests; "S" being the highest classification in this category

### **PYRO SAFE i** – up to 3 hours insulation

- Ductwork offers insulation of up to 3 hours at 1200°C. Thickness and density is calculated by the type of system and time period required
- Its insulation is a compact calcium magnesium silicate blanket made from low bio-persistence wool with a thickness of 38mm
- It has a resistance to both thermal shock and mould growth (anti-microbial) ideal for hospital applications



## UL Listed Damper Series

# UL Listed Dampers

Fire Dampers

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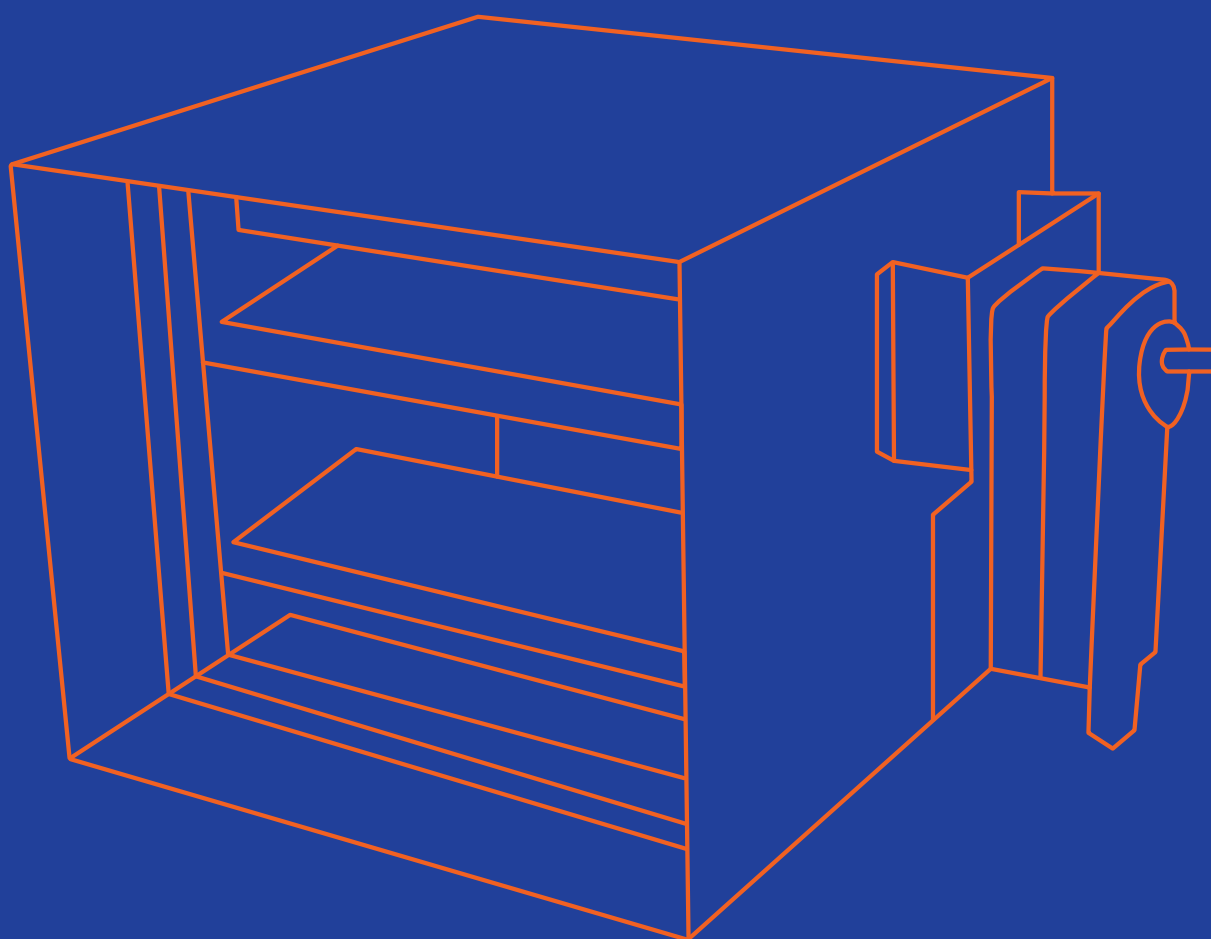
Smoke Dampers

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Ceiling Dampers

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Combination Fire & Smoke Dampers



PYRO  
SAFE

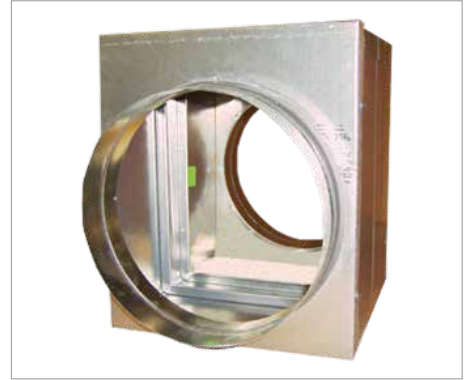
### CURTAIN FIRE DAMPERS (STATIC)



**FD-SALB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Integral Sleeve, Type A



**FD-SB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Integral Sleeve, Type B



**FD-SC**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Integral Sleeve - Round, Oval, Rectangular & Low Profile - Transitions Optional



**FD-C**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve



**FD-ALB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve, Type A



**FD-B**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve, Type B



**FD-ASL**  
Slimline Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve - Out of Wall Option, Type A



**FD-BSL**  
Slimline Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve, Type B



**FD-AUSL**  
Ultra Slimline Curtain Fire Damper - 1-1/2 & 3 Hour - Static - Optional Sleeve, Type A



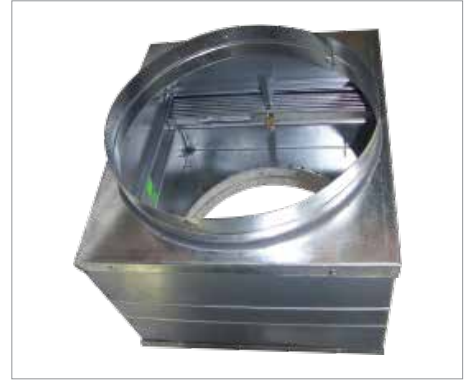
## CURTAIN FIRE DAMPERS (DYNAMIC)



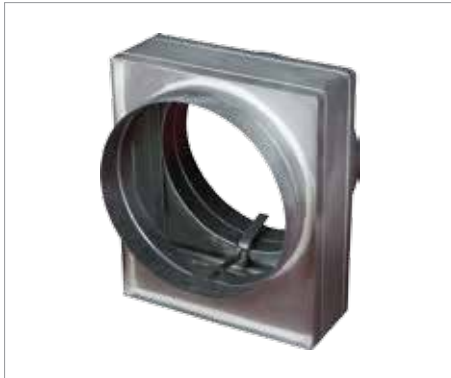
**FDD-SALB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Integral Sleeve, Type A



**FDD-SB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Integral Sleeve, Type B



**FDD-SC**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Integral Sleeve - Round, Oval, Rectangular & Low Profile - Transitions Optional



**FDD-C**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Optional Sleeve - Round, Oval & Rectangular - Transitions Optional



**FDD-ALB**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Optional Sleeve, Type A



**FDD-B**  
Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Optional Sleeve, Type B



**FDD-ASL**  
Slimline Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Optional Sleeve - Out of Wall Option, Type A



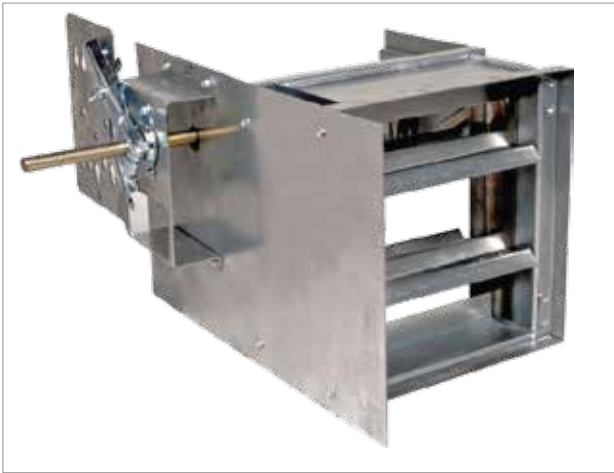
**FDD-BSL**  
Slimline Curtain Fire Damper - 1-1/2 & 3 Hour - Dynamic or Static - Optional Sleeve, Type B

*Refer to website for other available models*

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## 3V BLADE FIRE DAMPERS

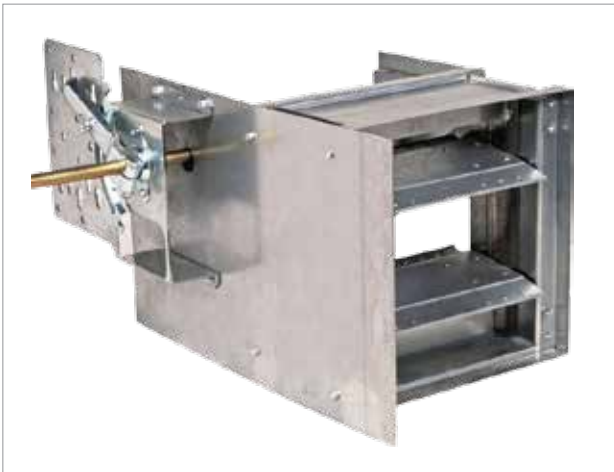
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- | **FD-110-3V**  
Multi-Blade Fire Damper -  
1-1/2 & 3 Hour - Static
- | **FDD-110-3V**  
Multi-Blade Fire Damper -  
1-1/2 & 3 Hour - Dynamic - 3V  
Blade - Optional Sleeve - Out of  
Wall or Round Option

## AIRFOIL BLADE FIRE DAMPERS

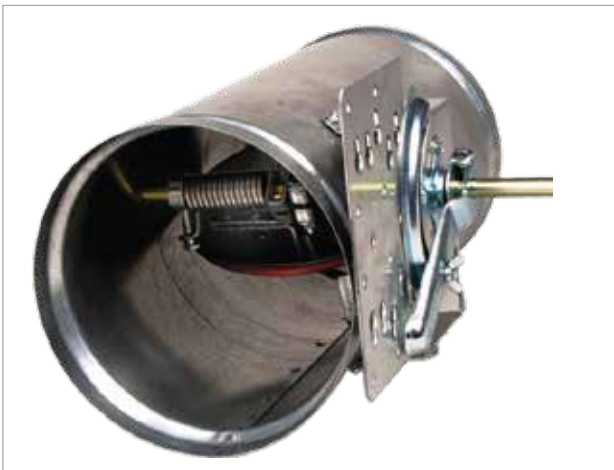
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- | **FD-160-AF**  
Multi-Blade Fire Damper -  
1-1/2 & 3 Hour - Static - Airfoil  
Blade - Optional Sleeve -  
Out of Wall or Round Option
- | **FDD-160-AF**  
Multi-Blade Fire Damper - 1-1/2  
& 3 Hour - Dynamic - Airfoil  
Blade - Optional Sleeve - Out of  
Wall or Round Option

## TRUE ROUND FIRE DAMPER

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- | **FD-R (FDD-R)**  
True Round Fire Damper -  
Dynamic or Static 1-1/2 Hour

## Smoke Dampers

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### 3V BLADE SMOKE DAMPERS

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**S-3V-I**  
Low Leakage Smoke Damper,  
3V blade, Class I Leakage

**S-3V-II**  
Low Leakage Smoke Damper,  
3V blade, Class II Leakage

### AIRFOIL BLADE SMOKE DAMPERS

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**S-AF-I**  
Low Leakage Smoke Damper,  
Airfoil blade, Class I Leakage

**S-AF-II**  
Low Leakage Smoke Damper,  
Airfoil blade, Class II Leakage

### TRUE ROUND SMOKE DAMPERS

---



**S-RD-I**  
True Round Low Leakage  
Smoke Damper, Class I  
Leakage

**S-RD-II**  
True Round Low Leakage Smoke  
Damper, Class II Leakage, Optional  
Sleeve, Type B



### **C-RD & C-RD-A**

Ceiling Round Damper, 1-4 Hours rated, with and without volume controller

### **C-RD-T & C-RD-A/T**

Ceiling Damper Square and Rectangular transition plate, 1-4 Hours rated, with and without volume controller

### **C-S/R & C-S/R-A**

Square and Rectangular Ceiling Damper, 1-4 Hours rated, with and without volume controller

### **C/FS & C/FSB & C/FSX**

Square and Rectangular Ceiling Damper, 1-4 Hours rated, curtain blade type

### **C/FS-2F**

Slimline Ceiling Damper Square and Rectangular, 1-4 Hours rated, curtain blade type

### **C/FSR-1 & C/FSR-2**

Ceiling Damper Square to Round, 1-4 Hours rated, curtain blade type



## Combination Fire & Smoke Dampers

### 3V BLADE COMBINATION FIRE & SMOKE DAMPERS



#### **F/S-3V-I & F/S-3V-3-I**

Combination Fire/Smoke Damper  
1-1/2 & 3 Hours rated with Sleeve,  
3V blade, Class I Leakage

#### **F/S-3V-II & F/S-3V-3-II**

Combination Fire/Smoke Damper  
1-1/2 & 3 Hours rated with Sleeve,  
3V blade, Class II Leakage



#### **F/S-3V-FA-I**

Front Access Combination Fire/Smoke Damper  
1-1/2 Hours rated, 3V blade, Class I Leakage

#### **F/S-3V-FA-II**

Front Access Combination Fire/Smoke Damper  
1-1/2 Hours rated, 3V blade, Class II Leakage



#### **F/S-3V-OW-I**

Outside Wall Combination Fire/Smoke Damper  
1-1/2 Hours rated, 3V blade, Class I Leakage

#### **F/S-3V-OW-II**

Outside Wall Combination Fire/Smoke Damper  
1-1/2 Hours rated, 3V blade, Class II Leakage



#### **F/S-3V-CR-I**

Corridor Combination Fire/Smoke Damper  
1 Hour rated, 3V blade, Class I Leakage

#### **F/S-3V-CR-II**

Corridor Combination Fire/Smoke Damper  
1 Hour rated, 3V blade, Class II Leakage

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## AIRFOIL BLADE COMBINATION FIRE & SMOKE DAMPERS

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**F/S-AF-I & F/S-AF-3-I**

Combination Fire/Smoke Damper  
1-1/2 & 3 Hours rated with Sleeve,  
Airfoil blade, Class I Leakage

**F/S-AF-II & F/S-AF-3-II**

Combination Fire/Smoke Damper  
1-1/2 & 3 Hours rated with Sleeve,  
Airfoil blade, Class II Leakage



**F/S-AF-OW-I**

Outside Wall Combination Fire/Smoke Damper  
1-1/2 Hours rated , Airfoil blade, Class I Leakage

**F/S-AF-OW-II**

Outside Wall Combination Fire/Smoke Damper  
1-1/2 Hours rated , Airfoil blade, Class II Leakage



**F/S-AF-FA-I**

Front Access Combination Fire/Smoke Damper  
1-1/2 Hours rated, Airfoil blade, Class I Leakage

**F/S-AF-FA-II**

Front Access Combination Fire/Smoke Damper  
1-1/2 Hours rated, Airfoil blade, Class II Leakage

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## True Round Combination Fire & Smoke Dampers

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**F/S-RD-I**

Combination Fire/Smoke Damper  
True Round 1-1/2 Hours rated,  
Class I Leakage

**F/S-RD-II**

Combination Fire/Smoke Damper  
True Round 1-1/2 Hours rated,  
Class II Leakage

# Dampers

Rectangular Dampers

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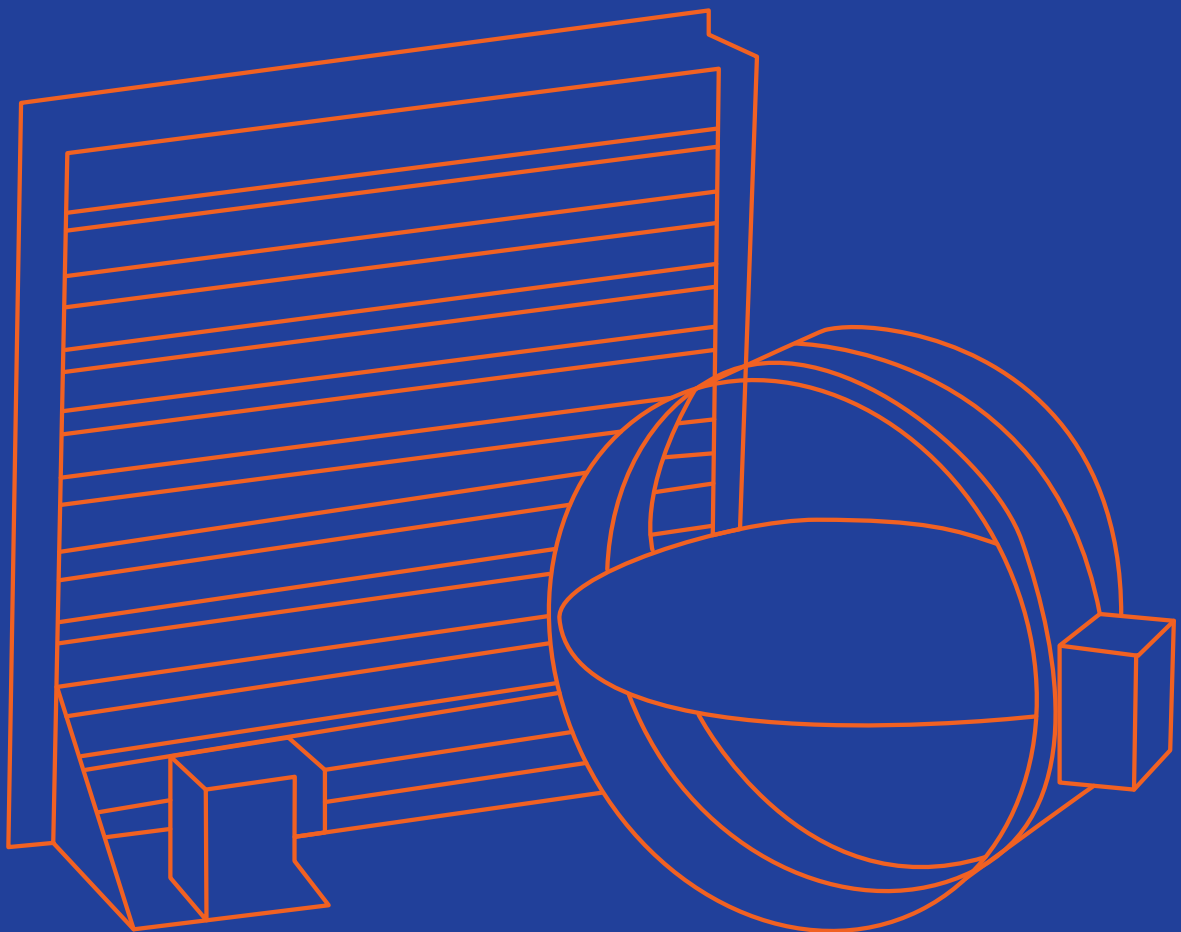
Round Dampers

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Backdraft Dampers

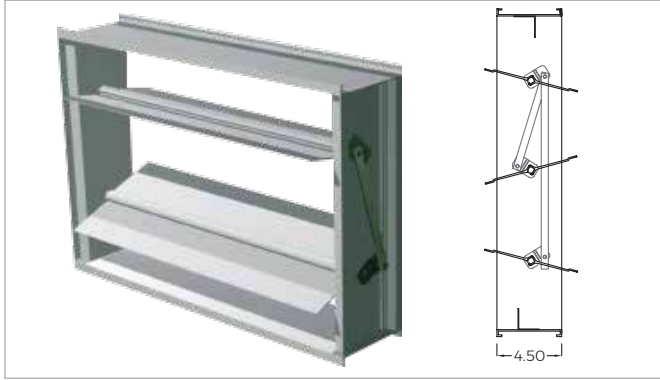
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Industrial Dampers



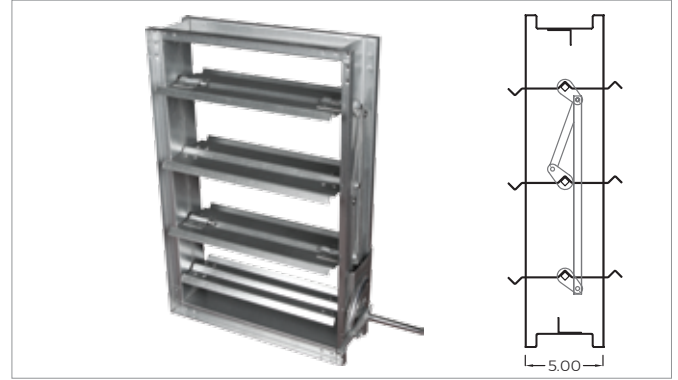
**KOMPONET**  
DAMPER SERIES

## Rectangular Dampers



**CD-100**  
Opposed blade control, extruded aluminum frame and blade construction, up to 3" w.g

**CD-101**  
Parallel blade control, extruded aluminum frame and blade construction, up to 3" w.g



**CD-110**  
Opposed blade control, 3V blade, steel, up to 4" w.g (Roll-formed)

**CD-111**  
Parallel blade control, 3V blade, steel, up to 4" w.g (Roll-formed)



**CD-120**  
Opposed blade control, formed steel frame and 3V blade up to 12" w.g

**CD-121**  
Parallel blade control, formed steel frame and 3V blade up to 12" w.g



**CD-150**  
Opposed blade control, extruded aluminium airfoil blades, up to 13" w.g

**CD-151**  
Parallel blade control, extruded aluminium airfoil blades, up to 13" w.g



**CD-160**  
Opposed blade control, airfoil blade steel, up to 13" w.g (Roll-formed)

**CD-161**  
Parallel blade control, airfoil blade steel, up to 13" w.g (Roll-formed)



**CD-170**  
Opposed blade control, formed steel frame and airfoil blade damper, Class I through III

**CD-171**  
Parallel blade control, formed steel frame and airfoil blade damper, Class I through III





#### MD-115

Opposed blade control, steel blades and roll-formed frame. Manual damper - not for shut-off application

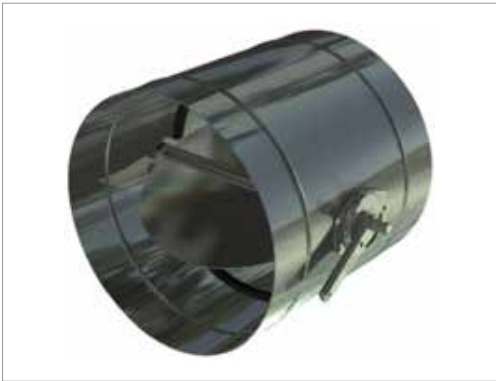
#### MD-116

Parallel blade control, steel blades and roll-formed frame. Manual damper - not for shut-off application

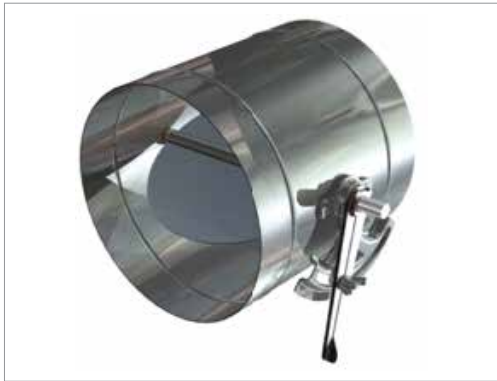
Model	Description	Max Face Velocity	Max Pressure	Max Temperature
CD-100/101	Extruded Aluminum Frame and Blade	2600fpm	3" w.g	185°F*
CD-110/111	Galvanized Steel Roll-formed Frame and 100mm-175mm wide, 16 Gauge 3V Blade	3500fpm	4" w.g	185°F*
CD-120/121	Galvanized Steel Roll-formed Frame and 150mm wide, 16 Gauge 3V Blade	3500fpm	12" w.g	185°F*
CD-150/151	Extruded Aluminum Frame and Blade	6000fpm	13" w.g	185°F*
CD-160/161	Galvanized Steel Roll-formed Frame and 100mm-175mm wide, 16 Gauge Airfoil Blade	6000fpm	13" w.g	185°F*
CD-170/171	Galvanized Steel Roll-formed Frame and 150mm wide, 16 Gauge Airfoil Blade	6000fpm	13" w.g	185°F*
MD-115/116	Galvanized Steel Roll-formed Frame and 150mm wide, 16 Gauge 3V Blade	3500fpm	4" w.g	185°F*

\* Available in stainless steel and higher max temperature

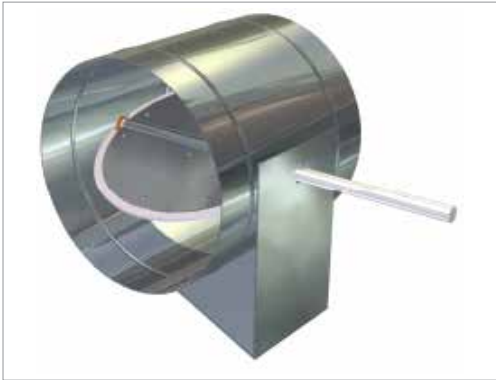
# Round Dampers



**ED**  
Economy Balancing Damper  
Manual balancing round damper is available up to diameter of 450mm, maximum pressure of 2" w.g



**RD**  
Balancing Damper  
Manual balancing round damper is available up to diameter of 1000mm, maximum pressure of 3" w.g



**RI**  
Control Damper  
Control round damper is available up to diameter of 1150mm, maximum pressure of 6" w.g

Model	Description	Max Face Velocity	Max Pressure	Max Temperature
ED	Galvanized Steel 24 Gauge Frame and 20 Gauge Blade	1400fpm	2" w.g	185°F*
RD	Galvanized Steel 20 Gauge Frame and 18 Gauge Blade	2600fpm	3" w.g	185°F*
RI	Galvanized Steel 24 Gauge Frame and 18 Gauge Blade	2600fpm	6" w.g	185°F*
DW	Galvanized Steel Dual Wall 18 Gauge Frame and 16 Gauge Blade	2600fpm	3" w.g	185°F*
R-PB/R-OB	Galvanized Steel 16 Gauge Frame and Blade	2000fpm	6" w.g	185°F*

\* Available in stainless steel and higher max temperature

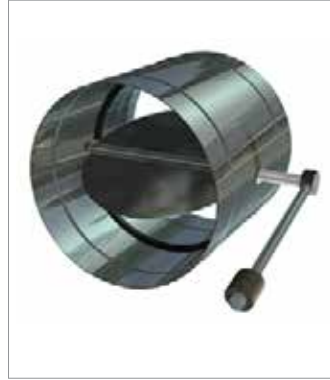
## Backdraft Dampers



**CB-600**  
Extruded aluminum backdraft damper, up to 1.5" w.g



**CB-601**  
Extruded aluminum backdraft damper, up to 3.5" w.g



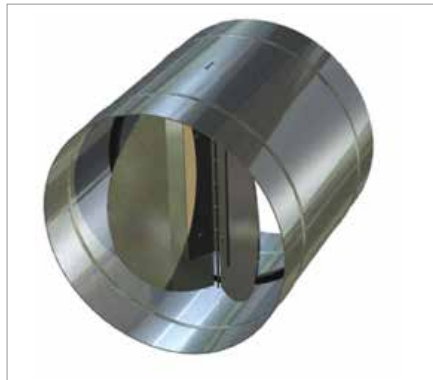
**CD**  
Counter balance round dampers are available with maximum diameter of 800mm



**HCB-700**  
Heavy duty rectangular backdraft damper, extruded aluminum frame and blade, up to 4" w.g



**HCB-750**  
Heavy duty backdraft damper, steel frame and 3V blade, up to 4"w.g



**BF**  
Butterfly spring operated round damper up to 2" w.g



**RCD**  
Static pressure relief damper, up to 3" w.g

Model	Description	Max Face Velocity	Max Pressure	Max Temperature
CB-600	Extruded aluminum Frame 57mm Wide, 1.5mm Thick and Blade 0.8mm Thick	1800fpm	1.5" w.g	180°F*
CB-601	Extruded aluminum Frame 57mm Wide, 1.5mm Thick and Blade 0.8mm Thick	2400fpm	2.5" w.g	180°F*
CB-602	Extruded aluminum Frame 57mm Wide, 1.5mm Thick and Blade 0.8mm Thick	4000fpm	3.5" w.g	180°F*
HCB-700	Extruded aluminum Frame Blade	4000fpm	4" w.g	180°F*
HCB-750	Galvanized Steel Roll-formed Frame and Blade	4000fpm	4" w.g	180°F*
BF	Spring Loaded Butterfly Damper	2200fpm	2" w.g	185°F*
RCD	Static Pressure Relief Damper	2000fpm	3" w.g	180°F*

\* Available in stainless steel and higher max temperature

## Industrial Dampers



**HD-292**  
Round industrial control damper  
Level IV industrial damper up to  
5" w.g



**HD-392**  
Round industrial control damper  
Level V industrial damper up to  
10" w.g



**HD-492**  
Round industrial control damper  
Level VI industrial damper up to  
20" w.g



**NAH-720-1/721-1**  
Frame 12 gauge HRS steel  
channel, 16 gauge



**NAH-720-2/721-2**  
Frame 10 gauge HRS steel  
channel, 16 gauge



**NAH-720-3/721-3**  
Frame 6mm thick HRS  
steel channel, 14 gauge



**NAH-720-4/721-4**  
Frame 10mm thick HRS  
steel channel, 12 gauge

Model	Description	Max Face Velocity	Max Pressure	Max Temperature
HD-292	Galvanized Steel up to 300mm Dia, 14 Gauge Frame	4000fpm	5" w.g	185°F*
HD-392	Carbon Steel, 12 Gauge Frame	6000fpm	10" w.g	185°F*
HD-492	Carbon Steel, 10 Gauge Frame	6400fpm	20" w.g	185°F*
NAH-720-1/721-1	Frame 12 Gauge HRS Steel Channel, 16 Gauge HRS steel Airfoil blade 125mm-200mm wide	4500fpm	20" w.g	400°F*
NAH-720-2/721-2	Frame 10 Gauge HRS Steel Channel, 16 Gauge HRS steel Airfoil blade 125mm-200mm wide	6000fpm	30" w.g	400°F*
NAH-720-3/721-3	Frame 6mm thick HRS Steel Channel, 14 Gauge HRS steel Airfoil blade 125mm-200mm wide	6000fpm	35" w.g	400°F*
NAH-720-4/721-4	Frame 10mm thick HRS Steel Channel, 12 Gauge HRS steel Airfoil blade 125mm-200mm wide	8000fpm	40" w.g	1000°F*

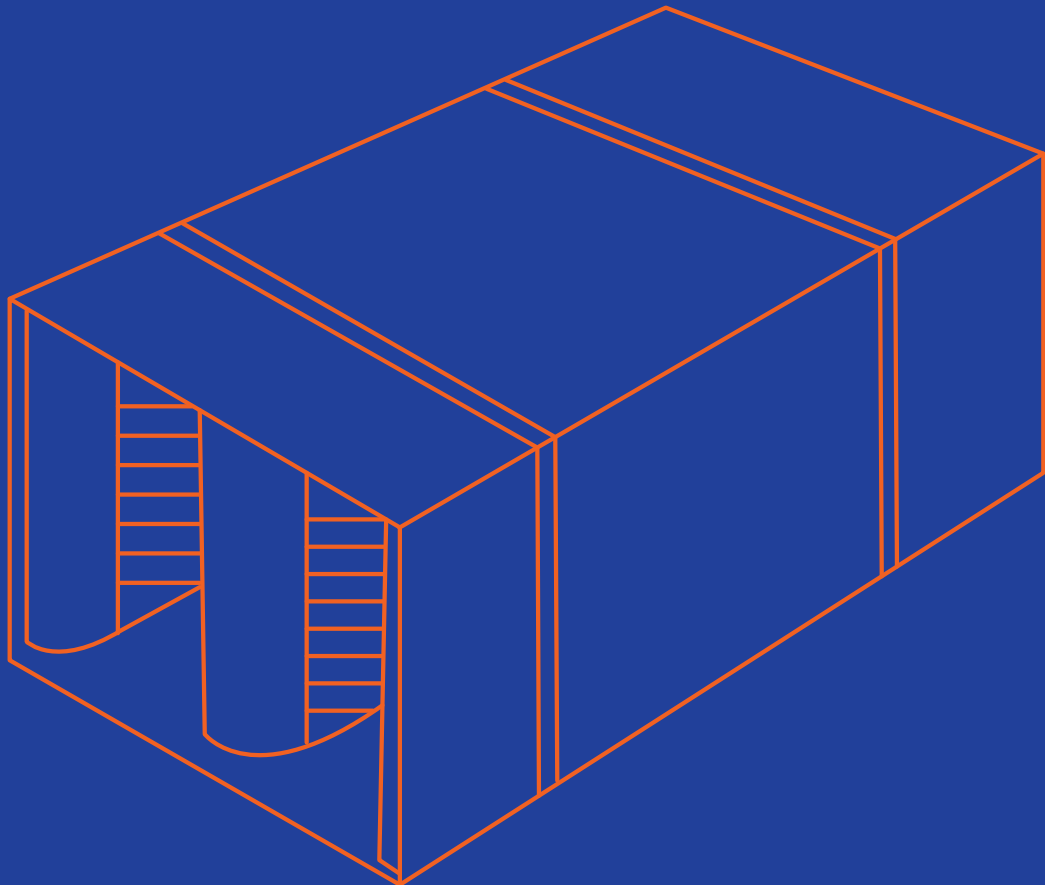
\* Available in stainless steel and higher max temperature

# Sound Attenuators

Rectangular Silencer

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Circular Silencer





## Rectangular Silencer

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Manufactured to join on to rectangular ductwork, Coustek rectangular silencers come in a variety of configurations. All of the silencers have the ability to be stacked into large banks, thus accommodating an infinite amount of duct sizes, eliminating expensive transitions.

**Casing:** Casing is made of 1.0mm thick (20 gauge) galvanized steel. Various materials such as stainless steel, aluminum are available on request

**Splitters:** Splitters are made of 0.8mm thick high quality galvanized perforated sheets

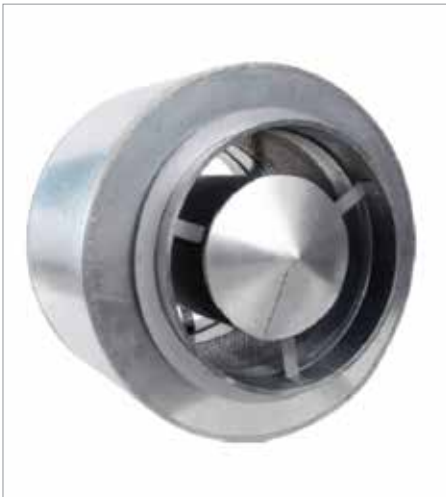
**Infill Insulation:** Acoustic media used shall be short fiber-free inorganic glass fiber with long, resilient fibers, bonded with thermosetting resin

**Sealant:** High-pressure duct sealant is applied inside the casing along the length of each seam, and for rectangular casings behind each flanged corner that coincides with a seam to make it airtight.

**Airway Area & Width:** Airway area and width may differ based on technical calculations and final dimensions of attenuator.

## Circular Silencer

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Circular silencers are installed in the duct work between spaces, which must provide noise reduction of air tolerated noise to at least match the sound transmission loss of the separating structure.

**Outer Casing:** Outer casings of standard circular silencers shall be made of lock former quality, galvanized steel, Type G90 (316/304 stainless steel, aluminum), in the following gauges:

OUTSIDE DIA. METAL GAUGE- (0-10"w.g+)

300-650mm: 22ga

675-1500mm: 18ga

1525-2100mm: 16ga

**Inner Casing:** Constructed of 0.7mm perforated pre galvanized sheet steel

**Acoustic Infill:** Filler material, except for reactive (no media) silencers shall be inorganic glass fiber of a proper density to obtain the specified acoustic performance and be packed under not less than 5% compression to eliminate voids due to vibration and settling. Material shall be inert, vermin and moisture proof.

**End Connections:** Tapped end ring inserts are standard, alternative connections, and would be spigot or rolled angle flanges.

**Performance:** A central pod is fitted, constructed from 0.7mm perforated pre galvanized sheet steel with conical, domed or flat ends as appropriate constructed from pre galvanized sheet steel.

# Louvers

Fixed Louvers

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Acoustical Louvers

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Wind-driven Rain Louvers

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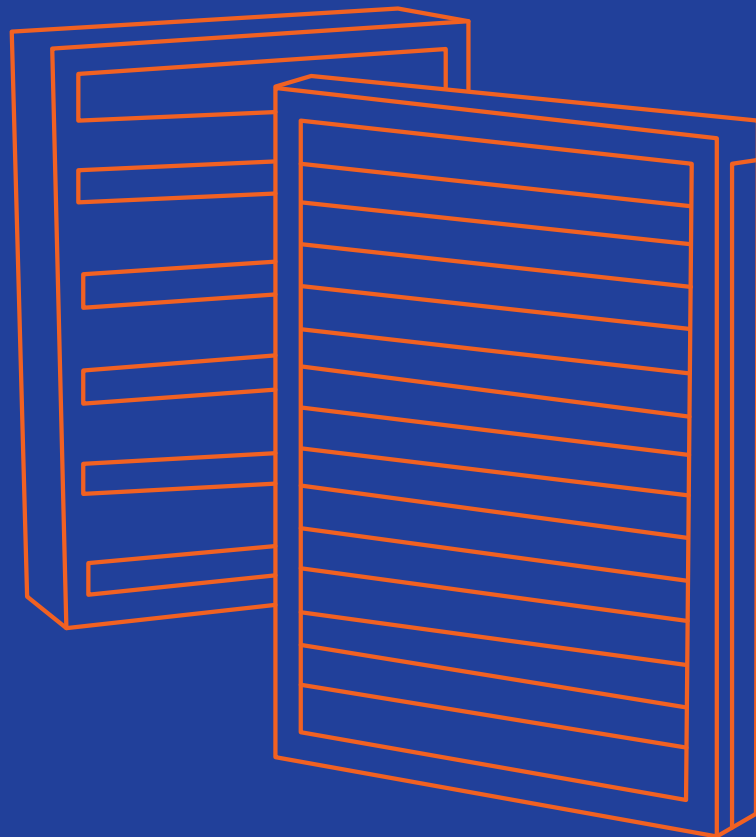
Adjustable Louvers

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Combination Louver/Damper

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Sand Trap Louvers



## Fixed Louvers



**EL-4**  
4" deep, fixed blade, extruded aluminum



**EL-6**  
6" deep, fixed blade, extruded aluminum



**FL-D-2**  
2" deep, fixed blade, drainable, extruded aluminum



**FL-D-4**  
4" deep, fixed blade, drainable, extruded aluminum



**FL-D-6.1**  
6" deep, high performance fixed louver, extruded aluminum



**SFL-2**  
2" deep, fixed "J" blade, formed steel



**SFL-4**  
4" deep, fixed "J" blade, formed steel



**SFL-D-4**  
4" deep, fixed blade, formed steel, drainable

**SFL-D-6**  
6" deep, fixed blade, formed steel, drainable

Model	Blade Angle	Blade Style	Blade	Material	FA*	fpm	CFM	W.C*	Sq. Ft.
EL-4	4.63	40°	J/K	.081 EA	53%	994	8369	.19	7.49
EL-6	6.2	45°	J	.125 EA	52%	834	6889	.12	8.26
FL-D-2	2.16	37°	Drainable	.060 EA	54%	805	6971	.09	8.66
FL-D - 4	4.19	37°	Drainable	.081 EA	50%	1250	10,025	.15	8.02
FL-D-6.1	6.2	37°	Drainable	.081 EA	54%	1250	10,888	.16	8.71
SFL-2	2.13	45°	J	18 ga. galv.					
SFL-4	4.13	45°	J	18 ga. galv.	47%	840	6342	.08	8.42
SFL-6	6	45°	J	18 ga. galv.	47%	896	6782	.14	7.57
SFL-D-4	4.13	45°	Drainable	18 ga. galv.	47%	1056	7888	.15	7.47
SFL-D-6	6.13 4	5°	Drainable	18 ga. galv.					

\* Free area based on 48" x 48", pressure drop at 1,000 fpm.

Acoustical Louvers



**XAC-4**  
8" deep acoustical  
louver, formed steel



**XAC-6**  
12" deep acoustical  
louver, formed steel



**XAC-9**  
12" deep acoustical louver,  
formed steel (variation in  
construction to XAC 6)



**AXF-12**  
12" deep acoustical louver,  
airfoil blade, formed steel

**AXF-8**  
8" deep acoustical louver,  
airfoil blade, formed steel

Model	Depth	Blade Style	Noise Reduction						FA	fpm	CFM	W.G
			125	250	500	1K	2K	4K				
XAC-4	8	Straight	6	4	7	12	14	10	28% 4.46	868	3871	.08
XAC-6	12	Straight	7	6	9	12	14	10				
XAC-9	12	Straight	8	8	13	17	16	12				
AXF-12	12	Straight	6	5	8	11	10	8				
AXF-8	8	Straight	12	11	12	13	13	13				

Wind-driven Rain Louvers



**SED-4**  
4" deep, fixed blade,  
drainable, wind/rain,  
extruded aluminum



**RD-4**  
4" deep, fixed vertical blade,  
drainable, wind/rain,  
extruded aluminum



**RD-8**  
8" deep, fixed blade, drainable,  
wind/rain/sand, extruded  
aluminum



**DHV-4**  
4" deep, fixed blade,  
drainable, wind/rain,  
extruded aluminum



**XSD-130**  
5" deep wind driven  
rain louver

Model Angle	Depth	Blade Style	FA sq.ft.	Wind Velocity	Rainfall (in/hr)	fpm Core	Effectiveness Ratio	Class	fpm	CFM	W.G.
SED-4	4.16	Drainable	35% 5.57	29,50	3,8	137	99.8	A	1086	6049	.21
RD-4	4.16	Vertical	40% 6.32	29,50	3,8	484	99.5	A	1000	6320	.35
RD-8	8.5	Sand/Rain	29% 4.58				99.9	A	940	4580	.13
DHV-4	4.16	Drainable	48% 7.75	29,50	3,8	974	99	A	1250	9688	.28
XSD-130	5.1	Drainable	46% 7.38	29,50	3,8	468	99.2	A	1000	7380	0.16



## Combination Louver/Damper



**CFL-D-4**  
4" deep, drainable,  
extruded aluminum



**CFL-D-6**  
6" deep, drainable,  
extruded aluminum

Model	Depth Angle	Blade Style	Blade	Material	FA sq. ft.	fpm	CFM	W.G
CFL-D-4	4.16	37°	Combo	.081 EA	46%	924	6754	.07
CFL-D-6	6.2	37°	Combo	.125 EA	47%	1250	9463	.11

## Adjustable Louvers



**SAFL-4**  
4" deep, adjustable, "J"  
blade, formed steel



**SAFL-6**  
6" deep, adjustable, "J"  
blade, formed steel



**AFL-D-4**  
4" deep, adjustable  
blade, extruded  
aluminum

**AFL-D-6**  
6" deep, adjustable  
blade, extruded  
aluminum

Model	Depth Angle	Blade Style	Blade	Material	FA sq. ft.	fpm	CFM	W.G.
SAFL-4	4.13	45°	Adj/Drain	18 ga galv	47%	840	6342	.09
SAFL-6	6.13	45°	Adj/Drain	18 ga galv	47%	896	6783	.13
AFL-D-4	4.25	37°	Adj/Drain	.081 EA	43%	1217	8288	.11
AFL-D-6	6.2	37°	Adj/Drain	.081 EA	54%	922	7892	.08

Description

The sand trap louver is used as pre-filter for the protection of air conditioning plants in areas exposed to extreme levels of industrial pollution. It has a degree of separation of sand and large dust particles, even in cases of high dust concentrations. The vertically arranged sections and holes for sand drainage ensure the sand trap louver is self cleaning and maintenance-free. The sand trap louver is designed to separate large particles at low air velocities, thus avoiding excessive dust loading on conventional plant filters. It is not intended as a substitute for conventional supply air filtration plant.

Standard Construction

Basic construction either aluminum (STL-AL-100) or galvanised steel (STL-G-100). Bird screen galvanized steel mesh 12 x 12 x 1 mm. Standard finish STL-AL-100 mill, STL-G-100 galvanized or powder coated RAL 9010 25% gloss, other RAL colours and of gloss finish on request. For all external application STL-AL-100 powder coat finish to BS EN 12206-1;2004, STL-G-100 powder coat finish to BS EN 13438:2005.



Louver Fixing

Louver rear section to be site drilled for fixings supplied by others.

Dimensions

Standard Sizes · Single Section

Width B in mm	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1949
Height H in mm	150	300	450	600	750	900	1200 <sup>1)</sup>	1050 <sup>1)</sup>	1350 <sup>1)</sup>	1500 <sup>1)</sup>	1650 <sup>1)</sup>	1800 <sup>1)</sup>	1949 <sup>1)</sup>

<sup>1)</sup> With Split blades and sand chute (see Detail 1)

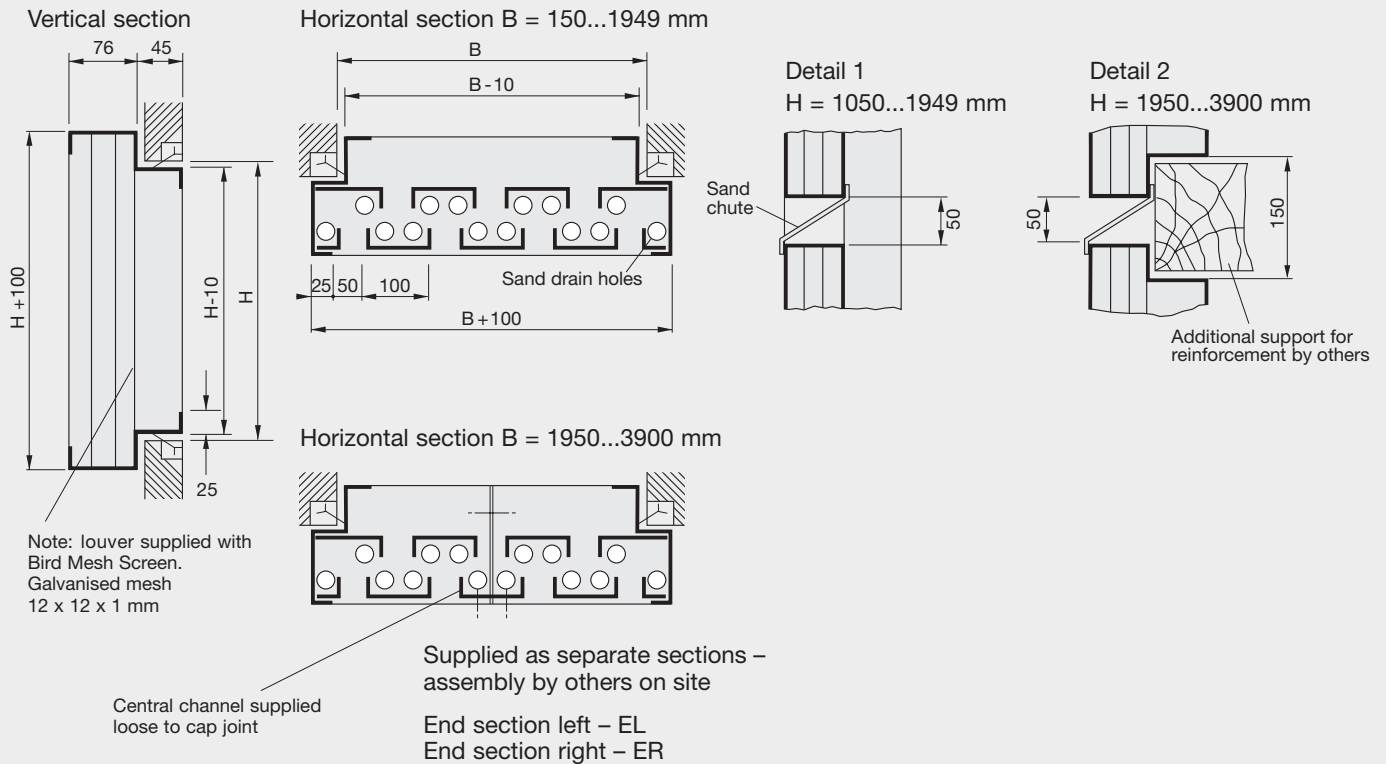
All combinations for B and H dimensions can be supplied. For sizes larger than indicated in the table several sections can be combined to provide any combination of overall width or height. Sand trap louvers with H between 1050 and 1949 integral sand chutes are fitted (see detail 1), H between 1950 and 3900 they are split on height and supplied with additional sand chute (see detail 2), loose for fitting on site by others. The additional support for reinforcement and assembly of the sand trap louver combination is to be supplied on site by others. Sand trap louvers with B = 1950 to 3900 are also

split into end section left, end section right and middle if required. The vertical joint between two end sections of sand trap louver is capped on site by others with a loose channel section supplied.

Construction

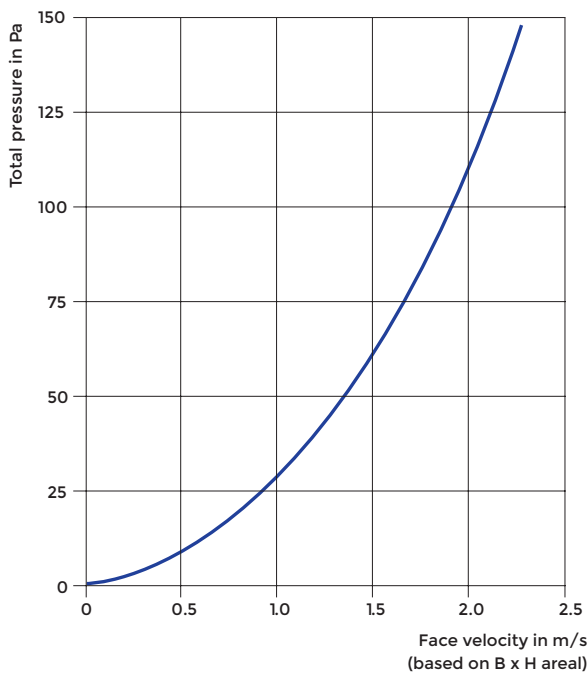
Two rows of vertically arranged channels sections to form a labyrinth for the air path. Base frame has drainage holes for the sand ensuring the louver is self cleaning and maintenance free.

## CONSTRUCTION



## TECHNICAL DATA

### Pressure Drop



### Filtration

The filtration performance is dependant on the dust type and the velocity of the air:

Particle Size Range	Filtration Efficiency in %	
	at 1.0 m/s	at 2.0 m/s
350-700	90	70
75-700	60	approx. 30

### Example

For normal operation conditions the sand trap louvers should be rated for a face velocity of approx 1.0 m/s.

Volume flow	2430 l/s (8750) m <sup>3</sup> /h
With a face velocity of 1.0 m/s	
Area of louver required	approx. 2.4 m <sup>2</sup>
Dimensions selected	
– Assembly width	1800 mm
– Assembly height	1350 mm
Total pressure drop	approx. 30 Pa

### Specification Text

Sand trap louvers for the protection of air intakes exposed to extreme levels of industrial/sand pollution. To separate large dust particles/sand at low air velocities, to be self cleaning and maintenance free. To be used as initial filter to protect conventional plant filters from excessive dust loading.

## Few Iconic Projects

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## Product Range

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- Fire-rated Ductwork
- UL Listed Dampers
- Industrial Dampers
- Volume Control Dampers
- Sound Attenuators
- Louvers

### Our Brands



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