control & backdraft dampers

From low-pressure operations to heavy-duty industrial applications, Ruskin provides the perfect control damper. Every Ruskin damper is built with performance in mind and tested to AMCA Standards in Ruskin’s laboratory. Ruskin works with a variety of materials including, galvanized steel, stainless steel, aluminum and fiberglass to match your exact specifications.

Ruskin’s CD60 Airfoil Ultra-Low Leakage Control Damper provides greater leak protection when closed, and due to its airfoil design, an extremely low pressure loss when fully opened. As the lowest leakage rated control damper, the CD60 is the best damper in its class — saving the most energy during and after hours. The CD60 offers quality and performance that is typical of all Ruskin products.

CD 60 — Galvanized Aerofoil Blades 152mm
Max. air leakage = 0.07%.
Min. size = 203x254mm
Max. single section size = 1524x1524mm
Max. multiple section size = Unlimited
CD35 & CD36 — Galvanized Steel 3V Groove Blades
152mm
Max. air leakage - 4.32% without seal and 0.47-1.13% with different type of seals
Min. size - 127x127mm with single blade
Max. single section size - 1219x1829mm
Max. multiple section size - Unlimited

CD 40 — Extruded Aluminum Aerofoil Blades 102mm
Max. air leakage - 0.08%
Min. size - 152x152mm with single parallel blade and 192x229mm with two blades (opposed or parallel)
Max. single section size - 152x1829mm
Max. multiple section size - Unlimited

CD 51 — Extruded Aluminum Flat Blades 152mm
Max. air leakage - 0.18%
Min. size - 152x127mm with single blade and 152x229mm with two blades (opposed or parallel)
Max. single section size - 1219x1829mm
Max. multiple section size - Unlimited

CD 50 — Extruded Aluminum Aerofoil Blades 152mm
Max. air leakage - 0.07%
Min. size - 152x229mm with opposed blade and 152x127mm with parallel blade
Max. single section size - 152x1829mm
Max. multiple section size - Unlimited

CDRS 25 — Round Galvanized Steel Singe Blades
Max. air leakage - 0.04-0.14% depending upon size
Min. size - 102mm
Max. size - 610mm
Casing length - 176mm

BD 6 — Extruded Aluminum Blades in 52mm frame, used for medium back draft duty conditions (30Pa-30Pa).
Max. system velocity - 2500FPM
Max. air leakage - 0.7%
Min. size - 152x152mm
Max. size single section - 1219x1321mm
Max. multiple section size - Unlimited
INDUSTRIAL DAMPERS

For over 50 years, Ruskin has been a leader in designing and manufacturing durable, high performance control dampers for industrial ventilation applications. Constructed from heavy-duty steel with the most advanced equipment in the industry, Ruskin Industrial Dampers can stand up to the toughest and most demanding environments and can be custom-built to meet the exact needs of virtually any ventilation or process application.

Ruskin’s experienced engineering and operations teams provide quality products through continued commitment to research and development and the introduction of new technologies. This commitment to advancement in product technology has led to the expansion of Ruskin’s AMCA-registered Research and Development facility.

CBS 7 — All Galvanized Steel construction to meet industrial heavy duty requirements in 203.65mm frame.
Max. system velocity – 3000FPM
Max. air leakage – 0.67% with seals and 3.33% without seals
Min. size – 152x152mm
Max. size – 1296x2448mm

CDR 82 — All Heavy Duty Steel Construction Damper to control air flow within round ductwork in medium pressure industrial HVAC Systems.
Max. air leakage – 0.32% with seal and 1.00% without seal
Min. size – 102mm dia.
Max. size – 1524mm dia.

CBS 92 — Extruded Aluminum Blades in 229x51mm
Galvanized Steel Frame to meet extra heavy duty conditions.
Max. system velocity – 6000FPM
Max. air leakage – 0.45% with seals and 25% without seals
Min. size – 152x152mm
Max. size – 1524x2448mm

TFD 82 — Combination Fire and Smoke Tunnel Ventilation Damper. Tested to UL555S Class 1 for smoke leakage and certified to BS476:20 as a 4 Hr. Fire Damper. Also tested along with Actuator at 250°C for 1 hour. Available in all Galvanized Steel or Stainless Steel construction.
Min. size – 305x305mm
Max. single section size – 2153x2003mm
FIRE / SMOKE DAMPERS

Designed to protect life and property, Ruskin manufactures a complete line of UL classified dampers. To meet the diversity of fire and smoke protection requirements, Ruskin dampers are available in a range of classifications and with a variety of standard features and options. Ruskin smoke damper s are all UL555S Classified and cover Leakage Classes I through III. Ruskin fire dampers meet UL555, UL555C, NFPA, and requirements for primary fire dampers in walls, ceilings and floors. They are suitable for both dynamic "fans on" or static systems. Ruskin's combination fire/smoke dampers are designed to operate as an integral part of an engineered smoke control system.

SD 60 & SD 60-2 - Galvanized Steel Multiple Aerfoil Blade Smoke Dampers to meet UL555 smoke leakage as per Class I & II and Elevated temp. Rating of 250 and 350°F. Also meet requirement of NFPA 92A & 92B. Min. size - 200x152mm Max. single section size - 1250x1825mm Max. multiplex section size - 3050x3050mm 3710x3710mm 1450x4765mm

FSD 60, FSD 60-2 & FSD60-3 - Fire and Smoke Dampers to meet UL555 1-1/2 & 3 Hr. Fire Rating and UL555S smoke leakage as per Class I, II, and Elevated Temp. rating of 250 and 350°F with multiple Aerfoil Blades for use in Dynamic or Static System. Meets the requirements of NFPA 92A & 92B. Min. size - 200x152mm Max. single section size - 1250x1825mm Max. multiplex section size - 3050x3050mm 3710x3710mm 1450x4765mm

FD60 & FD60-3 - Fire Dampers to meet UL555 1-1/2 and 3 Hr. Fire rating with multiple Aerfoil Blades for use in Dynamic and Static System. Min. size - 200x152mm Max. single panel size (vertical) - 813x1219mm (FD60) and 762x1219mm (FD60-3) Max. multiple section size (vertical) - 1630x2438 or 3048x1219mm (FD60) and 1524x2438 or 3048x1219mm (FD60-3)

FSD 35 & FSD 36 - Fire and Smoke Dampers to meet UL555 1-1/2 Hr. Fire Rating and UL555S smoke leakage as per Class III A and Elevated Temp. rating of 250 and 350°F with multiple 3V Groove Blades for use in Dynamic or Static System. Also meet the requirements of NFPA 92A & 92B. Min. size - 200x152mm Max. single section size (vertical) - 314x1219mm Max. multiple section size (vertical) - 3200x2438mm

Fire Damper - tested as per UL 555 by CBRI, Roorkela.
RI-FD-F - Fire Damper tested by CBRI as per UL 555. Certified for 120 minutes fire rating with multiple 3V Groove blades. 16G C-channel GI frame in 157 mm depth and 30 mm flange. Min Size (WXH) 203x152mm Maximum multiple section Size (WXH) 3048x1219mm

Fire Damper with sleeve - tested as per UL 555 by CBRI, Roorkela.
RI-FD-F-S - Fire Damper tested by CBRI as per UL 555. Certified for 120 minutes fire rating with multiple 3V Groove blades. 16G Hat channel GI frame with 432 mm sleeve without flanges. Min Size (WXH) 203x152mm Maximum multiple section Size (WXH) 3048x1219mm

NOTE: All FD/FSD/GD Dampers are designed for use in systems with airflow in either direction with velocities to 2000 FPM and pressure to 1000 Pa. Few sizes can be worked up to higher velocities and pressure. Consult Ruskin Titus India for select sizes. All FD/FSD Dampers are suitable for installation in horizontal position also. Consult Ruskin Titus India for UL classified Max. size.
AIR MEASURING

Managing airflow in today's HVAC systems requires precision. Every state in the USA has adopted international codes as a guide to promote occupant health and safety by improving methods of measuring and controlling the minimum outside air. Ruskin's complete line of air measuring and IAQ products are designed with the latest code requirements in mind.

AMS — Ruggedly built Air Measuring Station in Galvanized Steel casing equipped with Air straightener, High Performance Extruded Aluminum sensing station and a Pressure Transducer to convert Velocity Pressure to a control signal. Ideally suited to measure air flow in any duct system. Min. size - 152x152mm, Max. size single section - 1524x829mm, Max. multiple section size - Unlimited

Ruskin Sound Control is the recognized leader of acoustical and thermal panels and duct-mounted sound attenuaters. Ruskin’s experience and knowledge means a complete line of acoustical products that perform aerodynamically as well as acoustically.

SoundChek panels have been designed and tested to meet the highest of industry standards. HeatChek thermal panels combine premium structural integrity and thermal characteristics in prefabricated, easy-to-erect modular enclosures. A variety of silencers are available (straight, tapered, tubular, elbow and acoustical louvers) or they can be custom-designed to fit any need.

TYPE A, AM & DM — Rectangular Dissipative Silencers with Fully Tapered Pods in Galvanized Steel ensure maximum attenuation at lowest pressure loss. Supplied in multiple modules of maximum size 610mmx914mm stacked to make large Banks. Available in standard length of 914, 1524, 2133 and 3048mm

TYPE ELBSP, ELBMP & ELBLP — Rectangular Elbow Silencers in Galvanized Steel are ideal in situations where space does not permit installation of straight silencers. Can be nested and stacked for large duct sizes. Available in wide variety of configurations such as T shaped, Z shaped and Transition Elbow. Can be mounted Horizontal or Vertical.

AMS050 — AMCA approved Air Monitoring Station combines the function of Ultra low leakage control damper with Air Monitoring Station in one assembly. The control signal from Transducer sent to BMS and in response BMS position the control damper. Stand alone control package is also available for applications having no BMS system. Min. size - 152x152mm, Max. size single section - 1524x1829mm

TYPE SLF, MLF and LLF — Straight Pod Dissipative Silencers in Galvanized Steel offers additional attenuation in lower Frequencies Band especially in 2133 and 3048mm long Models. Max. module sizes and standard lengths are same as Type A, AM & DM.

TYPE AX & XFA — Silencers offer maximum noise attenuation for Tubular Silencers in Round Duct applications. Available from 254mm to 1981mm dia. in 2xDia. standard length (914mm Min.) XFA AXIAL Fan Silencers are designed fan specific from 610mm to 1828mm dia. These silencers help to Enhance Fan Performance.

Note: 1. Also Available are Packless Rectangular and Tubular silencers for Clean room applications.
2. Contact Ruskin Titus India for selection on RUSKIN software for any specific applications.
Ruskin offers a variety of louvers to meet a wide range of needs. Available with a highly weather-resistant Kynar anodized finishes, Ruskin louvers can withstand the harshest environments. Available in many depths, Ruskin louvers accommodate various blade angles with high free area for low pressure drop. Ruskin’s adjustable louvers and louver/damper combinations allow our customers to enjoy the benefit of architectural styling with air control and shut off.

**ELF 2110** — Thin Line Drainable Louvers in (51mm deep) frame are designed for walls, doors and partitions. These provide attractive appearance with rugged aluminum construction finished in weather-proof paint with 36% free area.

**L 375D** — High performance Drainable Rain Louvers in Galvanized Steel construction finished in weather-proof paint. Louvers have 102mm depth with 51% free area.

**L 5261** — Sand Louvers are designed to remove dust particles in the 140-206 micron size. Made of Galvanized Steel finished in weather-proof paint finish also has low pressure drop and architecturally styled for pleasing appearance. Available in 102mm depth with 25% free area.

**L 330** — Non Drainable Blades in 102mm Deep Frame in Galvanized Steel construction finished in weather-proof paint with 53% free area.