

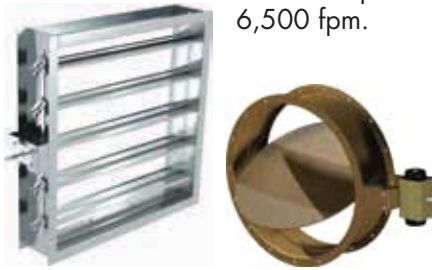
# DAMPERS

## Control Dampers

- HEAVY DUTY/INDUSTRIAL
- VOLUME CONTROL
- MANUAL BALANCING
- BLAST
- TORNADO
- BUBBLE-TIGHT



HEAVY DUTY/INDUSTRIAL CONTROL DAMPERS have a heavy duty flanged frame designed to regulate airflow and provide shutoff in HVAC or industrial process control systems. They are available in 3V, airfoil or round blade styles. The HCD series is designed for applications with pressure up to 45 in. wg and velocities up to 6,000 fpm. HCDR series is designed for applications with pressure up to 20 in. wg and velocities up to 6,500 fpm.



### Model

HCD-120, 130, 135, 140, 220, 230, 240, 330, 430, 530

HCDR-050, 150, 250, 350, 351

BUBBLE-TIGHT DAMPERS are designed for isolation applications. Bubble-tight means the damper has the lowest possible leakage: zero. Every bubble-tight damper is factory leakage tested to ensure a bubble-tight seal. This damper is recommended for two position shut off applications.



### Model

HBT-221; HBTR-151

CONTROL DAMPERS are designed to regulate the airflow in a HVAC system. They can be used in intake, exhaust, or mixed air applications. These dampers require operation by either manual, electric or pneumatic actuators.

MANUAL BALANCING DAMPERS are designed to regulate flow of air in an HVAC system. They are used to accomplish system balancing. Each damper is equipped with a locking quadrant which fixes the damper blades in place after adjustment. These dampers are not intended to be used in applications as a positive shut off or for automatic control.



### Model

MBD-10, 10M, 15; MBDR-50

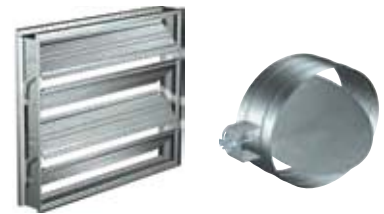
TORNADO DAMPERS are designed to remain open during normal operating conditions to allow normal airflow. In the event of a tornado, the HTOD series are designed to react to rapid pressure changes. These models are double flanged channel frame style dampers with single thickness blades. The HTOD-330 will close in the same direction as normal flow. The HTOD-331 will close in the opposite direction as normal flow.



### Model

HTOD-330, 331

VOLUME CONTROL DAMPERS regulate the flow of air and can also be used as a positive shutoff or automatic control. They are available in 3V, airfoil, round and vertical blade styles.



### Model

VCD-20, 23, 33, 34, 40, 42, 43; VCDR-50, 53

BLAST DAMPERS are designed to remain open under normal operating conditions to allow normal airflow. In the event of an explosion, the HBS series are designed to react to the shock-wave and close, helping to contain the explosion. These models are double flanged channel frame style dampers with single thickness blades. The HBS-330 will close in the same direction as normal flow. The HBS-331 will close in the opposite direction as normal flow.



### Model

HBS-330, 331

# DAMPERS

## Backdraft & Relief

- BACKDRAFT
- BAROMETRIC RELIEF
- HEAVY DUTY/INDUSTRIAL BACKDRAFT
- PRESSURE RELIEF



BACKDRAFT DAMPERS are used in ventilation systems to allow airflow in one direction and prevent airflow in the opposite direction. A relief damper has an elevated and adjustable start-open pressure while providing the backdraft function.

BACKDRAFT DAMPERS can be used as exhaust or intake dampers. To help open the damper blades, backdraft dampers use springs, adjustable counterbalance weights, or a motorpack.



Model
BD-100, 300, 320, 330
WD-100, 110, 120, 200, 210, 220, 300, 320, 330, 340, 400, 410, 420, 430
ES-10, 11, 12, 30, 31, 32, 40, 41, 42;
EM-10, 11, 12, 30, 31, 32, 40, 41, 42
WDR-53

HEAVY DUTY/INDUSTRIAL BACKDRAFT DAMPERS have a flanged frame and are designed to prevent backflow at static pressures up to 20 in. wg. Counterbalance weights



are mounted externally for easy adjustment and balancing in the field.

Model
HB-110, 120, 230, 240, 330
HBR-050

BAROMETRIC RELIEF DAMPERS are backdraft dampers with an adjustable start-open pressure. They are used for gravity ventilation and low velocity systems. Counterbalance weights provide the ability to fine tune start-to-open and full-open operation.



Model
BR-10, 11, 12, 30, 31, 32, 40, 41, 42

PRESSURE RELIEF DAMPERS are backdraft dampers with adjustable start-open pressure, capable of maintaining a relatively constant pressure at various airflows, which closes upon a decrease in differential pressure. Pressure relief dampers do not immediately open fully upon reaching their start-open pressure. HPR series dampers are flange mounted with counterbalance weights mounted externally for easy adjustment and balancing in the field.



Model
HPR-120, 230, 330

# LOUVERS

- STATIONARY
- COMBINATION

## STATIONARY

STATIONARY EXTRUDED ALUMINUM LOUVERS are used in applications that require intake and exhaust ventilation with moderate protection from rain and weather infiltration. Drainable and non-drainable models available.

### DRAINABLE BLADES

Designed with a drainable head and drainable blades to protect air intake and exhaust openings in the building's exterior walls by minimizing water penetration. Drain gutters are located on every blade to capture water which is dispersed to the jambs and drained out of the sill.



**Model**

VASD-2, 4, 6

### NON-DRAINABLE BLADES

Designed to incorporate traditional non-drainable J style blades with sloped sill. High free areas provide minimum resistance to airflow. Design incorporates hidden mullions when multi-wide sections are needed.



**Model**

VASJ-2, 4, 6

## COMBINATION

EXTRUDED ALUMINUM COMBINATION LOUVER/DAMPERS incorporate operable and stationary blades into one common frame member. Design maintains a stationary appearance when adjustable blades are closed. A tight seal is created to prevent the passage of air.

### DRAINABLE BLADES

All models include drainable stationary blades and a drainable head member. Drainable adjustable blades have either concealed blade linkage or exposed on-blade linkage. Design of VACC-6 incorporates airfoil adjustable blades for less airflow resistance.



**Model**

VACC-4, 6

# LOUVERS

- ADJUSTABLE
- WIND DRIVEN RAIN
- PENTHOUSE

## ADJUSTABLE

ADJUSTABLE EXTRUDED ALUMINUM OPERABLE BLADE LOUVERS are designed to be open or closed to protect air intake and exhaust openings in exterior building walls. Louver blades are center pivoted and can be operated manually or by any commonly specified damper actuator.

### DRAINABLE BLADES

Model VAAD offer concealed blade linkage. Model VAAD-6 offers 35° blade angle.



#### Model

VAAD-4, 6

## WIND DRIVEN RAIN

WIND DRIVEN RAIN LOUVERS are Venco's most effective louvers in minimizing water penetration through wall openings. Designed to protect air intake and exhaust openings in building exterior walls that are sensitive to the penetration of wind driven rain.

### HORIZONTAL BLADES

Horizontal blades offer the traditional louver look and excellent protection against wind driven rain.



#### Model

VAHH-5

### VERTICAL BLADES

Vertical blades offer the best protection against wind driven rain although the vertical blade look is not typical.



#### Model

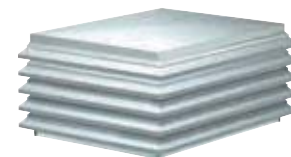
VAVH-5

## PENTHOUSES

LOUVER PENTHOUSES offer clean lines, mitered corners, all aluminum construction and removable hoods.

For complete product information on Model VLPI Intake and VLPR Relief, contact your local representative.

THE LOW SILHOUETTE LOUVERED PENTHOUSES are designed for intake (VLPI) or relief (VLPR) applications with either natural gravity or positive pressure systems. These units feature a storm-proof aluminum louver with mitered corners and clean horizontal lines. The design affords lower pressure drops while maintaining low hood heights. Removable cover is lined with fiberglass to prevent condensation. Maximum throat dimension is 60 x 120 inches.



#### Model

VLPI, VLPR