

# Dampers

## Life Safety Products

Life safety dampers are intended to protect openings in walls and/or partitions to prevent the spread of fire and/or smoke. The four types are:

- Ceiling Radiation Dampers
- Fire Dampers
- Smoke Dampers
- Combination Fire Smoke Dampers



CRD-1



CRD-2



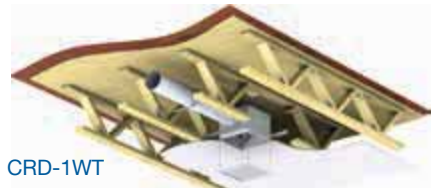
CRD-60

## Ceiling Radiation Dampers

Ceiling radiation dampers are designed to protect penetrations through the ceiling membrane of fire resistive floor ceiling and/or roof ceiling assemblies. These products are tested and listed in accordance with UL Standard 555C.



CRD-1WJ



CRD-1WT

Qualified for installation in wood joist ceiling construction.

Qualified for installation in wood truss construction.

Model	In Stock Sizes	Best Available Program
CRD-1	6x6, 8x8, 9x9, 10x10, 12x12, 14x14, 22x10, 22x22	In Stock
CRD-2	6, 8, 10, 12	
CRD-1WT	Not applicable	1 Day
CRD-501	Not applicable	
CRD-1LP, CRD-1WJ, CRD-60	Not applicable	3 Days
CRD-60B, CRD-60X	Not applicable	5 Days



Model DFD-210, DFDAF-310, DFDAF-330 and SEDFD-210 are AMCA Licensed for Air

## Fire Dampers

Fire dampers are required by all building codes to maintain the required fire resistance ratings of walls, partitions and floors when they are penetrated by air ducts and transfer openings. These products are tested and classified in accordance with UL Standard 555. Fire dampers close automatically upon detection of heat, blocking the opening and preventing the spread of fire into the adjoining compartment or spaces.

Model	Best Available Program
DFD-110, 150, DFD-150x10, DFD-150x12, DFD-150x14, DFD-150x16, FD-110, 150, FD-150x10, FD-150x12, FD-150x14, FD-150x16; DFD-310, 350; FD-310, 350; FDR-510; DFDR-510; DFD-210, DFDAF-310, 330; ODFD-150, OFD-150	1 Day
SEDFD-210	3 Days
FD-100, SSDFD-150, SSFD-150; FD-300, SSDFD-350, SSFD-350; SEDFDR-510; SSDFDR-510; SSFDR-510	5 Days

SE in model name denotes 316 stainless steel  
SS in model name denotes 304 stainless steel



Model SMD-201, 201M, 202, 203, 301, 302, 301M, 302M; SESMD-201 and SSSMD-201 are AMCA Licensed for Air

## Smoke Dampers

Smoke dampers have two applications:

1. They may be applied in a passive smoke control system where they simply close and prevent the circulation of air and smoke through a duct or a ventilation opening in a smoke barrier.
2. They may be applied as part of an engineered smoke control system designed to control the spread of smoke using walls and floors as barriers and using the building's HVAC system and/or dedicated fans to create pressure differences.

These products are tested and classified in accordance with UL Standard 555S.

Model	Best Available Program
SMD-201, 201M, 202, 203; SMD-301, 301M, 301V, 302, 302M; SMD-401, 401M; SMDR-501, 502	1 Day
SESMD-201; SSSMD-201	3 Days
SESMDR-501; SSSMDR-501; HSD-401	5 Days
SMD-401EF	10 Days

SE in model name denotes 316 stainless steel  
SS in model name denotes 304 stainless steel



Model CFSD-211, 212; FSD-211, 211M, 212, 213, 311, 311M, 312, 312M, 331; SSFSD-211; SEFSD-211; and OFSD-211, 212, 311, 312 are AMCA Licensed for Air

## Combination Fire Smoke Dampers

Combination fire smoke dampers perform the function of both a fire damper and a smoke damper. Building layouts and designs often combine fire and smoke rated partitions and barriers requiring the installation of both a fire damper and smoke damper at the same location. These products are tested and classified in accordance with both UL555 and UL555S.

Model	Best Available Program
FSD-211, 211M, 212, 213, 311, 311M, 311V, 312, 312M, 331; CFSD-211, 212; GFSD-211, 212; OFSD-211, 212, 311, 312; FSDR-511, 512	1 Day
SEFSD-211; SSFSD-211	3 Days
SEFSDR-511; SSFSDR-511, 512	5 Days

SE in model name denotes 316 stainless steel  
SS in model name denotes 304 stainless steel



## Access Doors

Access doors are designed for use in low to medium pressure duct systems. They provide a durable, practical, and inexpensive means of gaining access to damper components inside the ductwork.

Model	Sizes	Best Available Program
CAD, HAD	6x6, 8x8, 10x10, 12x12, 14x14, 16x16, 18x18, 20x20, 24x24	In Stock
RAD Insulated	6 thru 24 inch duct diameter (in inch increments)	
RAD Uninsulated	6 thru 24 inch duct diameter (in inch increments)	

## Control Dampers

Control dampers are designed to control pressure, temperature or flow 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. There are seven types of control dampers:

- Air Measuring Dampers
- Insulated Thermally Broken Control Dampers
- Heavy Duty/Industrial Control Dampers
- Volume Control Dampers
- Face and Bypass Dampers
- Manual Balancing Dampers
- Remote Balancing Dampers



Model AMD-23 and AMD-33 are AMCA Licensed for Air Leakage and Air

### Air Measuring Dampers

Air measuring products help meet building minimum outdoor air requirements of ASHRAE Standard 62 or California Title 24 by providing accurate monitoring and control of outside air. The AMS is an accurate airflow measuring station. The AMD series combines the function of an accurate airflow measuring station and a low leakage control damper into one compact assembly.

Model	Best Available Program
AMD-23, 33, 42, 42V; AMS	10 Days

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Model ICD-44 and ICD-45 are AMCA Licensed for Air, Efficiency and Air Leakage

### Insulated Thermally Broken Control Dampers

Insulated thermally broken control dampers were developed for applications where it is necessary to minimize the transfer of heat or cold penetration and reduce condensation. Model ICD-44 features a thermally broken, insulated blade. ICD-45 features a thermally broken, insulated frame and blade. The ICD series meets the IECC (International Energy Conservation Code) requirements with a leakage rating of 3 cfm/ft<sup>2</sup> at 1 in. wg or less.

Model	Best Available Program
ICD-44, 45	5 Days



### Heavy Duty/Industrial Control Dampers

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, airflow or round blade styles. The HCD series is designed for applications with pressure up to 45 in. wg and velocities up to 6000 fpm. HCDR series is designed for applications with pressure up to 20 in. wg and velocities up to 6500 fpm.

Model	Best Available Program*
HCD-120, 130, 135, 140, 220, 230, 240	5 Days
HCDR-050,150, 250, 350, 351	10 Days

\*Mill finish



Model VCD-20, 40 are AMCA Licensed for Air  
Model VCD-23, 33, 34, 43 and SEVCD-23, 33 are  
AMCA Licensed for Air Leakage and Air

## Volume Control Dampers

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	Best Available Program
VCD-20, 23, 33, 34, 40, 42, 43; VCD-20V, 23V, 33V, 34V, 42V, 43V; VCDR-50, 53	1 Day
SEVCD-23, 33	3 Days
VCDRM-50, 53	10 Days

SE in model name denotes 316 stainless steel



## Face and Bypass Dampers

Face and bypass dampers are two connected dampers. This feature allows one damper to remain open while the other damper is closed. The FBH series are a horizontal style with dampers alongside of each other and the FBV series are a vertical style with dampers stacked.

Model	Best Available Program
FBH-23, 33, 43; FBV-23, 33, 43	3 Days



## Manual Balancing Dampers

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	Best Available Program
MBD-10, 10M, 15; MBDR-50	1 Day



## Remote Balancing Dampers

Remote balancing dampers offer the same function as manual balancing dampers plus the added benefit to control the damper remotely at the diffuser or wall plate. These dampers are ideal for applications where it is difficult to manually adjust the dampers and balance airflow. The "EZ Balance" remote control operates the damper motor by connecting to the wall, ceiling, or diffuser mounted RJ11 connector.

Model	Best Available Program
RBD-10, RBDR-50	1 Day

## Backdraft and Relief Dampers

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. There are four types:

- Backdraft
- Heavy Duty/Industrial Backdraft
- Barometric Relief
- Pressure Relief



Model BD-100, 320, 330 and ES-30, 31, 32 are AMCA Licensed for Air Leakage and Air

### Backdraft Dampers

Backdraft dampers are isolation dampers which allow airflow in one direction only. To help open the damper blades, backdraft dampers use springs, adjustable counterbalance weights, or a motorpack.

Model	In Stock Sizes	Best Available Program
BD-90	8x8	In Stock
BD-100	8x8, 10x10, 12x12, 16x16, 18x18	
BD-320	10x10, 12x12, 14x14, 18x18	
BD-330	9x9, 12x12, 14x14, 16x16, 18x18	
WD-100	8x8, 10x10, 12x12, 16x16, 18x18, 24x24, 30x30	
WD-320	10x10, 12x12, 14x14, 18x18, 22x22, 26x26, 32x32, 38x38	
WD-323	8x8, 10x10, 12x12, 15x15	
WD-330	9x9, 12x12, 14x14, 16x16, 18x18, 20x20, 23x23, 24x24	
WD-340	8x11, 9x12, 12x17	
WD-410	8x8, 10x10, 12x12, 16x16, 18x18, 24x24, 30x30	
ES-10, 11, 12, 30, 31, 32, 40, 41, 42; EM-10, 11, 12, 30, 31, 32, 40, 41, 42	Not applicable	1 Day
WD-110, 120, 200, 210, 220, 300, 400, 420, 430	Not applicable	3 Days
WDR-53	Not applicable	5 Days
SSWDR-53	Not applicable	10 Days



### Heavy Duty/Industrial Backdraft Dampers

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	Best Available Program*
HB-110, 120, 230, 240	5 Days
HB-330, HBR-050	10 Days

\*Mill finish



## Barometric Relief Dampers

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	Best Available Program
BR Series	5 Days
SEBR Series	5 Days

SE in model name denotes 316 stainless steel



## Pressure Relief Dampers

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	Best Available Program*
HPR-120, 230, 330	5 Days

\*Mill finish



## Blast Dampers

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 shockwave and close, helping to contain the explosion. These models are double flange channel frame style dampers with fabricated airfoil 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	Best Available Program*
HBS-330, 331	10 Days

\*Mill finish



Model IMO-311 and SSIMO-311 are AMCA Licensed for Air

## Marine Dampers

Marine dampers are United States Coast Guard Class A-60 division and ABS approved. The marine dampers were tested at Underwriters Laboratories (UL) in accordance with International Maritime Organization's (IMO) Fire Test Procedure code. Fire and combination fire/smoke dampers can be used in marine and offshore ventilation systems.

Model	Best Available Program
IMO-310, 311; SSIMO-310, 311	3 Days

SS in model name denotes 304 stainless steel