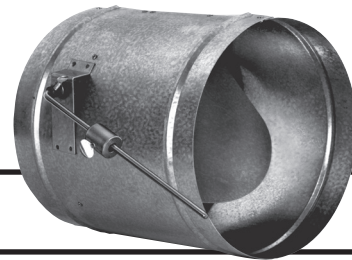


DuroZone[®]

INSTALLATION INSTRUCTIONS



DDRD ROUND PRESSURE RELIEF DAMPERS (DUMPER DAMPERS)

DuroZone Pressure Relief Dampers are used to automatically relieve Duct Systems of the pressure build up created, as zones are satisfied and dampers travel to a closed position. The Duro Zone Pressure Relief Damper provides a simple and reliable means for accomplishing this.

One common practice is the passing of "Dumped" air from the supply duct to the return duct. Should you elect this method of bypass, the connection from the supply should attach to the return duct a minimum of 10 feet away from the blower. This will allow sufficient mixing of the air streams to prevent too cold or too hot air passing over the heat exchanger or air conditioning coil. Dampers are available in standard sizes. Proper size is to be determined by the installer based on standard practice for duct sizing. The dampers can be doubled up where a discharge in excess of standard sizes is required. You will find that sizing is not critical.

ROUND PRESSURE RELIEF DAMPERS

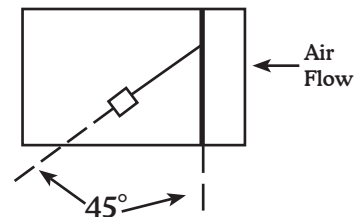
Special care should be exercised when using Round Pressure Relief Dampers.

The Damper should be fully supported wherever it is mounted. It should not be supported by just the two pieces of Flexible Ducting connected to the damper.

Setting The Damper For Operation

1-Install the counterbalance rod by slipping the short end into the 1/4" hole in the end bearing. Set the rod angled approximately 45° above the plane of the damper blade. Lock the rod into position with the thumb screw in the damper bearing.

2-Slip the counterweight to the top of the rod and tighten the thumb screw by hand to temporarily fasten the counterweight.



3-Set all thermostats so that all zones call for heat. Relocate the pressure relief damper counterweight to a point which keeps the damper blade closed without flutter.

4-Reset the thermostats to the desired system settings. When less than all zones call, the pressure relief damper should open to relieve excess pressure. When all zones call, the pressure relief damper should be closed.

NOTE: The Pressure Relief Damper adjustments are sufficient to take care of most conditions encountered. In rare cases it may be necessary to add or reduce weight. To add weight, slide several 1/4" washers onto the rod above the weight. You may want to reduce weight by cutting off a section of the counterbalance rod.

Duro Dyne Corporate Headquarters, Bay Shore, NY

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Duro Dyne Midwest • Duro Dyne West • Duro Dyne Canada

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ALL DuroZone DAMPERS FEATURE:

- 3 year limited warranty • Controlled bypass
- Maintenance free operation • Quick install mounting clips (except Round Dampers) •
- 100% factory testing • Screwless terminals
- Custom dampers and special controls are available on request.

DuroZone®

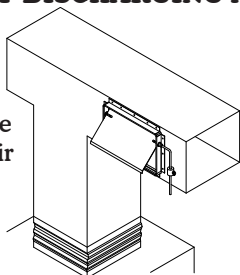
INSTALLATION INSTRUCTIONS

DD RECTANGULAR PRESSURE RELIEF DAMPERS (DUMPER DAMPERS)

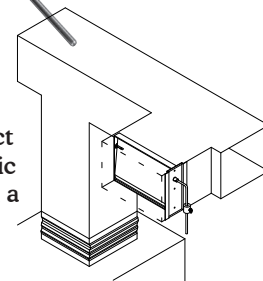


TWO COMMON METHODS OF DISCHARGING AIR

Mount the damper flush on the side of the duct to discharge air into the equipment room.

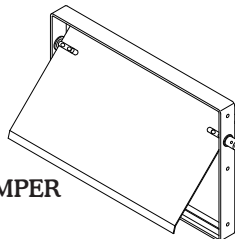


Install a take off in the side of the duct to direct "dumped air" to some specific area. The damper is installed through a 3 3/8" slot cut into the ductwork.



DUROZONE DUMPER DAMPERS INCLUDE:

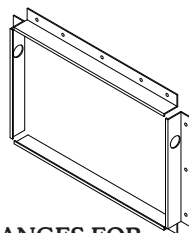
DAMPER



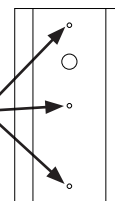
COUNTERBALANCE
ROD AND WEIGHT



4 FLANGES FOR
FLUSH MOUNTING



10-32 x 1/4"



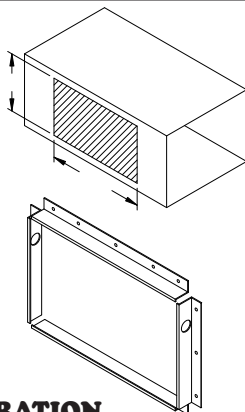
FACE PLATE FOR
"IN LINE" MOUNTING

NOTE: For in duct installation you must use #6x3/8" sheet metal screws (provided) to mount the face plate to the duct. Longer screws will interfere with proper damper operation. The face plate mounts to the damper frame with 10-32 x 1/4" round head machine screws provided.

INSTALLATION - FLUSH MOUNT:

1-Cut a hole in the duct the same size as the damper frame.

2-Slip the flanges on the damper frame and secure the flanges to the duct using the 6 x 3/8" sheet metal screws provided. Keep the damper centered on the hole to prevent interfering with the damper operation.



SETTING THE DAMPER FOR OPERATION

1-Install the counterbalance rod by slipping the short end into the 1/4" hole in the end bearing. Set the rod angled approximately 45° above the plane of the damper blade. Lock the rod into position with the thumb screw in the damper bearing.

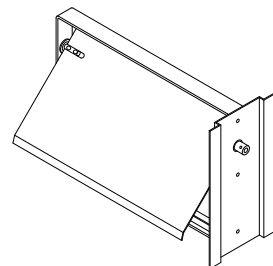
2-Slip the counterweight to the top of the rod and tighten the thumb screw by hand to temporarily fasten the counterweight.

3-Set all thermostats so that all zones call for heat. Relocate the pressure relief damper counterweight to a point which keeps the damper blade closed without flutter.

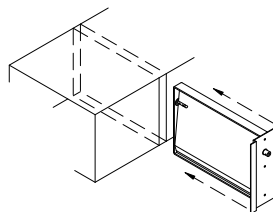
4-Reset the thermostats to the desired system settings. When less than all zones call, the pressure relief damper should open to relieve excess pressure. When all zones call, the pressure relief damper should be closed.

INSTALLATION - IN-LINE MOUNT:

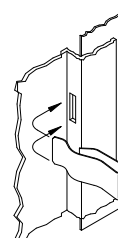
1-Mount the face plate on the damper by means of the 10-32 x 1/4" round head machine screws supplied. Be sure that the bearing extending through the face plate clears the hole in the face plate.



2-Cut a 1-1/4" slot in the discharge duct. Be careful to cut the slot on the correct side of the duct so the damper will open away from the main duct. This is important as the damper swings open in one direction only.



3-Secure face plate to ductwork with 6 x 3/8" sheet metal screws provided.



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