

CONTROL DAMPERS INSTALLATION AND OPERATING INSTRUCTIONS

1. LOCATION

A Damper must be sized to fit the opening properly. It should not be forced into undersized ductwork nor strained to suit an oversized opening. This will bend the frames causing air leakage. It must be installed plumb and squared both vertically and horizontally. Twisted and distorted frames will develop stresses causing linkage to bind and improper blade operation. All seams should be caulked.

2. OBSTRUCTIONS

Configuration of damper frames permits the use of screws, rivets, or welding to attached damper to duct or housing. Ends of fasteners must not protrude in any way which might interfere with blade movement. Dampers correctly mounted allow complete operation from completely closed to fully open.

3. MULTIPLE ASSEMBLIES

Where dampers consist of more than one panel, sections are mounted together to form larger dampers. Matching frame members must be tightly welded or bolted together in field. Multiple sections require additional structural support provided on site by others to insure complete rigidity. Horizontally mounted dampers may sag unless supported adequately. Blade motion is transmitted between adjacent panels by common blade shaft couplings; continuous control rods, or in the case of wide damper assemblies; by means of jackshafts. It is important that all shafts be accurately aligned, otherwise blade edges will bind and not seal.

4. ACTUATORS

Operation of dampers may be manual using locking quadrant handles, chain operators or other devices. For automatic operation, electric or pneumatic actuators can be connected to dampers either internally or externally. Dampers constructed with multiple panels require individual actuators or jackshafts. Actuators or multiple actuators should be of adequate torque capacity to effectively open and close the damper according to its type, its size, its location, and its function in the system related to air velocity and static pressure requirements.

5. LUBRICATION

Before initial operation, all moving parts of dampers should be first cleaned and then thoroughly lubricated. Dampers furnished with stainless steel side seals should also have the seals lubricated generously. Dampers should then be manually operated several times until linkages and blades operate freely.