

Installation Instructions

Slip-In Dampers


DAMPSLS & DAMPSLB

NOTE: Read the entire instruction manual before starting the installation.

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Have fire extinguisher available. After completing installation, use these instructions to check product operations.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.


Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **would** result in minor personal injury or product and property damage.

INTRODUCTION

These dampers are designed for easy installation in rectangular ductwork on residential new construction or retrofit applications. A 24 volt ac direct drive actuator is used for smooth quiet performance.

INSTALLATION CONSIDERATIONS

1. Place dampers away from areas that may be noise sensitive. It is recommended to install zone dampers near furnace plenum when possible. This may help ease installation as well as dissipate air noise associated with zoning.
2. Install dampers in rectangular or square duct systems only. Any frame misalignment will jam damper blades.
3. Install dampers so actuator is visible for inspection and accessible in the event it would ever need service.
4. Use sheet metal screws to secure damper in ductwork (do not try to weld dampers in any way).
5. To ensure proper fit and operation dampers must be sized according to ductwork. Dampers are made slightly smaller than nominal duct dimensions. (See Table 1.)

 **CAUTION:** Never force dampers into an undersized duct system, the excess pressure can cause damper blades to jam and cause improper operation.

NOTE: All dampers must be properly installed and supported according to local codes or SMACNA standards. Seal duct joints using duct tape, mastic, or other approved methods. Do not allow mastic to come in contact with actuator.

INSTALLATION

1. To apply Side Mount or Bottom Mount dampers first select location for damper to be installed. Cut out a 3 in. opening in 1 side of duct at selected location. Ensure opening is fully cut from top to bottom of seam, this will allow damper to be inserted without obstruction. (See Fig. 1 and 2.)
2. Slide damper into opening and check for proper alignment. Secure damper using sheet metal screws through clearance holes located on mounting plate.


 **CAUTION:** For most damper applications the mounting plate is sufficient in securing the damper into the duct system. However with larger size dampers (i.e. 10 x 18) or side mount dampers (or dampers mounted in a horizontal installation), it may be necessary to additionally secure damper from drooping inside duct system. Use extreme caution when inserting screws in the sides of dampers, be careful not to bind or damage assembly. Do not insert screws on the opposite frame end from actuator assembly, use side rails to secure. (See Fig. 3.)

Table 1—Damper Dimensions

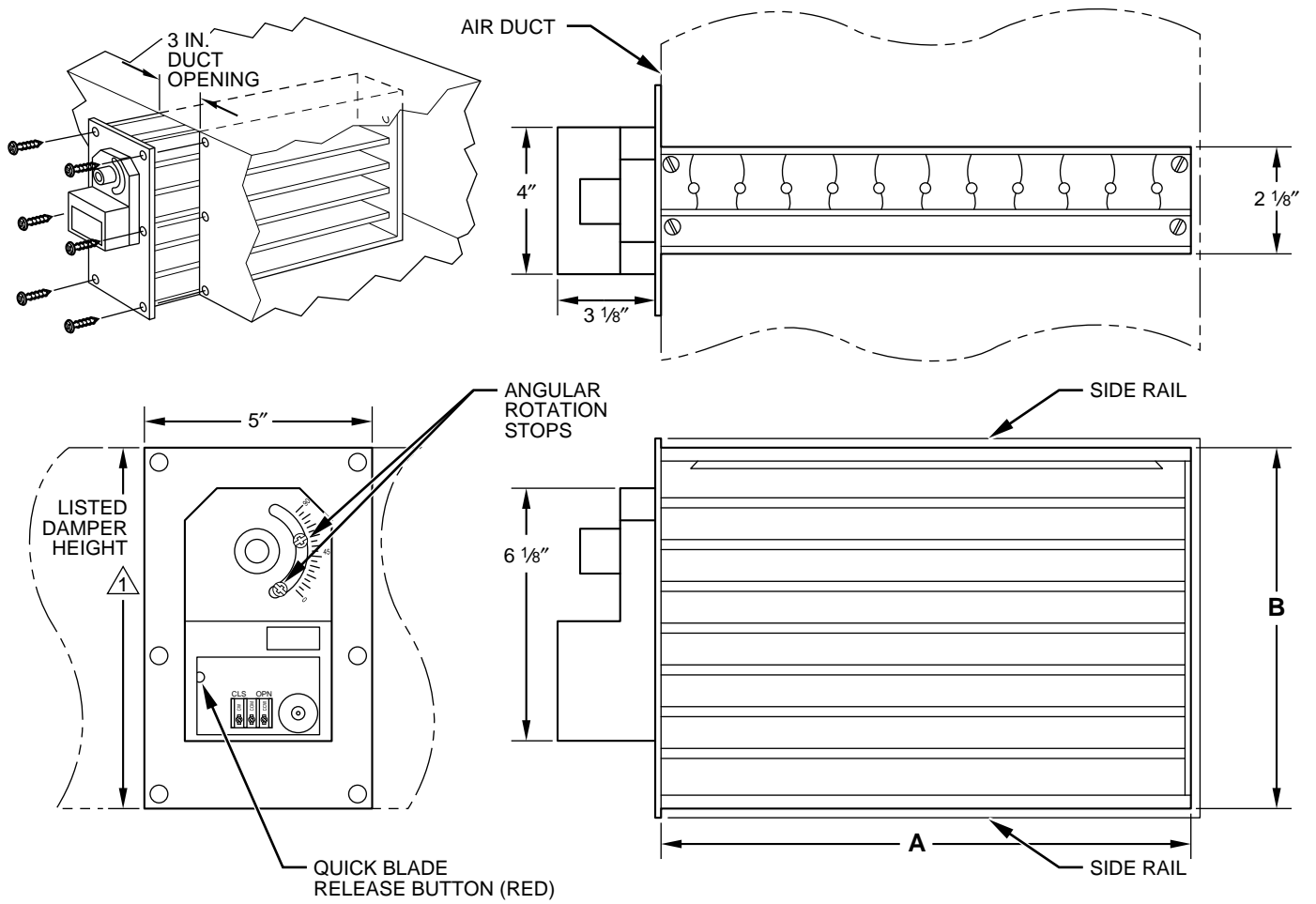
PART NUMBER	DESCRIPTION	A	B
DAMPSSL08X10	Side Mount, 8 x 10	9-7/8	7-13/16
DAMPSLB08X10	Bottom Mount, 8 x 10	7-13/16	9-7/8
DAMPSSL08X12	Side Mount, 8 x 12	11-7/8	7-13/16
DAMPSLB08X12	Bottom Mount, 8 x 12	7-13/16	11-7/8
DAMPSSL08X14	Side Mount, 8 x 14	13-7/8	7-13/16
DAMPSLB08X14	Bottom Mount, 8 x 14	7-13/16	13-7/8
DAMPSSL08X16	Side Mount, 8 x 16	15-7/8	7-3/16
DAMPSLB08X16	Bottom Mount, 8 x 16	7-13/16	15-7/8
DAMPSSL08X18	Side Mount, 8 x 18	17-7/8	7-13/16
DAMPSLB08X18	Bottom Mount, 8 x 18	7-13/16	17-7/8
DAMPSLB08X20	Bottom Mount, 8 x 20	7-13/16	19-7/8
DAMPSLB08X22	Bottom Mount, 8 x 22	7-13/16	21-7/8
DAMPSLB08X24	Bottom Mount, 8 x 24	7-13/16	23-7/8
DAMPSSL10X10	Side Mount, 10 x 10	9-7/8	9-13/16
DAMPSLB10X10	Bottom Mount, 10 x 10	9-13/16	9-7/8
DAMPSSL10X12	Side Mount, 10 x 12	11-7/8	9-13/16
DAMPSLB10X12	Bottom Mount, 10 x 12	9-13/16	11-7/8
DAMPSSL10X14	Side Mount, 10 x 14	13-7/8	9-13/16
DAMPSLB10X14	Bottom Mount, 10 x 14	9-13/16	13-7/8
DAMPSSL10X16	Side Mount, 10 x 16	15-7/8	9-13/16
DAMPSLB10X16	Bottom Mount, 10 x 16	9-13/16	15-7/8
DAMPSSL10X18	Side Mount, 10 x 18	17-7/8	9-13/16
DAMPSLB10X18	Bottom Mount, 10 x 18	9-13/16	17-7/8
DAMPSSL10X20	Side Mount, 10 x 20	9-13/16	19-7/8
DAMPSLB10X22	Bottom Mount, 10 x 22	9-13/16	21-7/8
DAMPSLB10X24	Bottom Mount, 10 x 24	9-13/16	23-7/8
DAMPSLB14X20	Bottom Mount, 14 x 20	13-13/16	19-7/8

- To wire damper remove plastic access door to expose terminal block. Route field wire through grommets located in plastic housing (field modify plastic housing to accommodate conduit connection if local code requires). Provide a strain relief to prevent wires from being pulled or snagged. Strip wire leads and install on appropriate terminals labeled: COM (common), OPN (open), CLS (close). Replace access door.
- In areas where a duct system may experience excessive condensing, carefully insulate over actuator assembly and mounting plate (check local codes). Make sure insulation does not interfere with operation of actuator.

After installation is complete, check dampers and verify they are all operating properly. When 24 vac is applied between common and open, the damper should go full open in approximately 15 sec. When 24 vac is applied between common and closed, the damper should close in approximately 15 sec. If 50 hz application is used, time will increase to approximately 18 sec.

NOTE: These dampers are designed to be as quiet and efficient as possible. However, slip-in style dampers may exhibit some airflow noise associated with zoning. It is recommended to check damper operation with airflow moving through the duct system. The possibility may exist to hear an audible whistle noise momentarily as damper blades near the closed position. If this occurs and poses a concern, you can set a minimum damper position by using the angular rotation stop on actuator. This will stop damper from closing all the way avoiding area where noise may be generated.

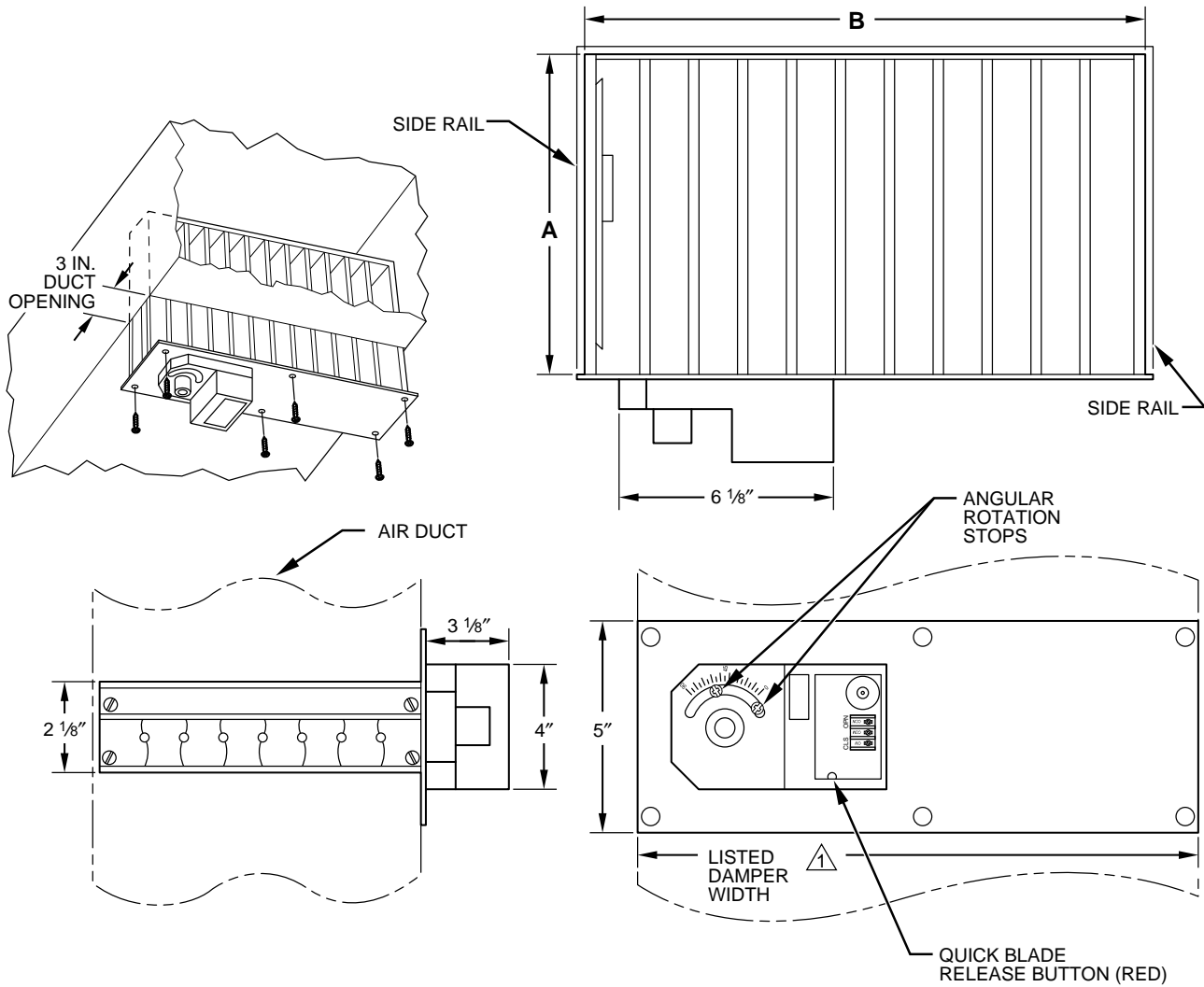
These dampers are also designed in such a way that if damper blades should jam or stall it will not damage the motor. If for any reason damper should jam, correct problem as soon as possible. Bending or twisting frame could result in permanent damage to the damper. If in an emergency it becomes necessary to force a damper open manually, press and hold the red quick blade release button with 1 hand and turn mounting hub to reposition damper shaft. Release button to hold damper shaft in new position.



1 LISTED DAMPER HEIGHT = ACTUAL AIR DUCT HEIGHT

Fig. 1—Side-Mount Damper Configuration

A95169



▲ LISTED DAMPER WIDTH = ACTUAL AIR DUCT WIDTH

Fig. 2—Bottom-Mount Damper Configuration

A95170

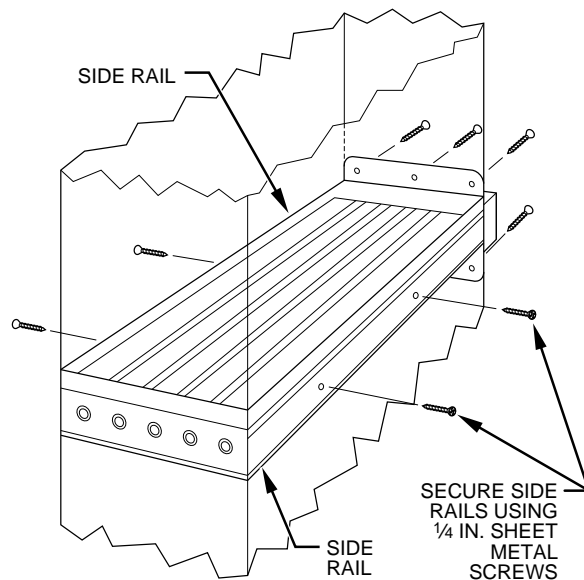


Fig. 3—Securing Damper To Air Duct

A95184