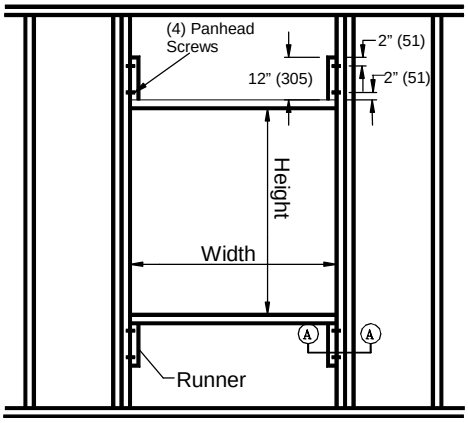
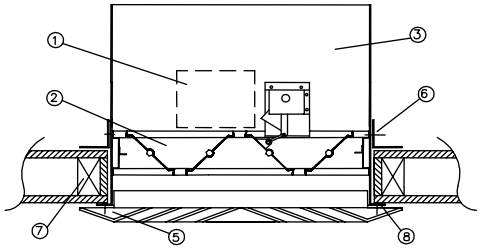
Installation Instructions Models – 471 & 472

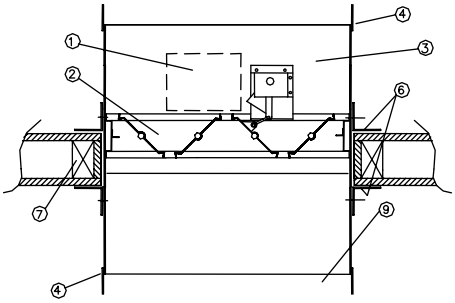
Design Features – U.L. Rated for dynamic closure & leakage CLASS I & CLASS II @ 250° F (121°C) or 350° F (177°C), Meets NFPA 90A &UL 555 & UL 555S, Seismic and fragility tested.



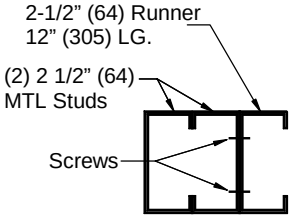
Typical Framing for Corridor Damper Installation



With Grille



Duct Installation



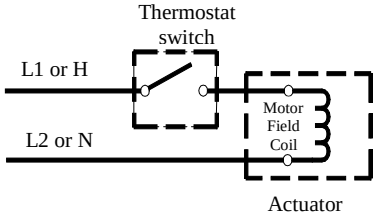
Section A-A

KEY TO DRAWINGS –

1. Actuator- location may very
2. Damper assembly
3. 18 ga. (1.3) galv. Sleeve x 16" (406) long
4. Break-away connection
5. Diffuser or grille (by others)
6. 1 ½" x 1 ½ " (38 x 38) 18 ga. (1.3) retaining angles. If ducted installation top and bottom angle is required
7. Wood framing members (1) hour resistance. Metal studs are optional.
8. 1" (25) sleeve flange
9. Ducted installation

Typical Installation Instructions

A. The standard mounting position of the top retaining angles ⑥ may vary on overall thickness of the ceiling and dependent upon materials being used.
B. If retaining angles are to be factory mounted, the type "X" gypsum wallboard thickness must be specified to ensure factory mounted angles are installed in the correct position, that way the sleeve flange is flush with the ceiling.
C. Fasten ⑥ to ③ with ¼" (6) bolts and nuts, 3/16"(5) steel pop rivets or welding. Angles do not overlap and are not fastened at corners.
D. Retaining angles must overlap with wall opening with a minimum of 1" (25) on all sides.
E. All fastening to be @ 8" (203) o.c. on all sides.
F. Ducted installation shall terminate at sleeve of damper with break-away connection. Secure damper with ¼" (6) dia. bolts and nuts, #10 (M5) sheet metal screws, 3/16" (5) pop rivets or welding. All fastening @ 8" (203) o.c.
G. All installation shall be made in accordance with the SMACNA standards and NFPA 90A.
H. Caulk joints and connections continuously with sealant, i.e. Dow Corning RTV #732 or GE RTV #108.
I. After installation make sure damper and operator are working properly.
J. Refer to manufacturers technical specification for electric and pneumatic operators.
K. Clearance requirements between sleeve and wall or floor shall be minimum of 1/8 per foot of width and height of sleeve. The maximum size of opening shall be 2" larger in width or height than the allowed minimum size.



Typical Electrical Wiring Diagram

FIRE & SMOKE AND SMOKE DAMPERS

This operation and maintenance instructions should not serve as a standard basis for all damper products and other manufacturers, but for Safeair-Dowco damper products.

All fire smoke and smoke dampers require routine maintenance procedures in order for dampers to operate as intended in any case in which fire and smoke may occur within the building. Periodic testing of all parts linked to the damper is essential to maintaining a working damper. Check that all actuators, blades, fans, etc. are functioning properly and that nothing is preventing blades or controls from operating. Be sure to check that nothing is blocking or hindering air way passage. Safeair-Dowco recommends that each routine operation and maintenance procedure follow with NFPA92A, NFPA80 and NFPA105 requirements and local authority approvals.

MAINTENANCE:

1. Check interior and exterior sides of dampers for any major defects or material disintegration that may prevent proper functioning of damper.
    a. In serious damage contact Safeair-Dowco http://safeair-dowco.com/contact.php
2. Re-tighten any loose linkage or attached equipment, such as actuator.
3. Shafts, bearings, pivot points etc. should be cleaned and lubricated with a light spray oil. Any and all access should be removed.
    a. *Use silicone based lubricant and not petroleum based lubricant*.
    b. Dampers with non-mettalic or carbon sleeve bearings do not require lubrication
4. Blades should be checked for freedom of movement.
5. Blades should also be disconnected from their operators and manually checked (Blades should move freely with no binding or twisting).
6. Motors (electric or pneumatic) should be visually checked through their complete cycle for defects, binding or misalignment. Operator anchorage and fittings should also be checked.
    a. Damper should be operated under normal airflow conditions.
7. If in any case actuators, blades or linkage is not properly functioning, contact Safe-Air Dowco at our given inquiry page located above to be further assisted.

TESTING PROCEDURE:

1. With the thermal disc intact, heat the thermal disc with a temperate heat source,
    a. Make sure not to overheat and damage the thermal disc.
2. Check that the thermal disc functions properly as it will activate the actuator to close the damper blades.
    a. **(Be sure to keep hands out of path while blades are closing)**
3. When testing procedure is done and all parts are working collectively and properly, allow thermal disc to cool.
4. Reset the disc located on the outside of damper, which will then re-open the damper blades allowing airflow.
5. Record date of testing procedure and label on a sheet.
6. Repeat testing procedure on a set periodic routine.