# United = Enertech

(ENGINEERS) SUBMITTAL DATA

**MODEL S-RD-I** 

TRUE ROUND - LOW LEAKAGE SMOKE DAMPER

U.L. 555S CLASSIFIED AND ULC S112.1 LISTED Class I Leakage Rated

### Application and Design

The Model S-RD-I is a UL/ULC listed and labeled Class I leakage rated True Round Smoke Damper. Blades are of the double thickness, round design. The damper is approved for airflow in either direction and provides a maximum leakage of 8 cfm/sq. ft at 4" wg. s.p. It has been designed to be installed in a vertical or horizontal mounting position in the ductwork or a separate sleeve within 24" of the smoke partition. These dampers are approved for use in engineered smoke control systems and are controlled via smoke detection system. Electric (24v, 120v, and 230v) or pneumatic actuators are used to operate the smoke dampers.

## **Standard Construction**

Frame: Roll formed Frame - Galvanized Steel - 16" Integral Sleeve Blades: Double thickness galvanized Steel of roll-formed construction.

Axles: Square plated steel

Seals: Pressure Sensitive 450° silicone blade edge seals and flexible metal jamb seals.

Linkage: Jackshafted to blade

Bearings: Bronze Oilite press-fit into frame

Designed and tested in accordance to standards: UL 555S, ULC S112.1. Labeled and listed by UL/ULC under File # R25410. They meet all the NFPA-90A, IBC Code, and other major code requirements for Smoke Dampers.

Transitions can be added to the ends of the damper to accept ductwork down to 4" in diameter.

| Standard Sizes (duct)              |  |  |  |  |
|------------------------------------|--|--|--|--|
| Min. V or H                        |  |  |  |  |
| 8" - 24" Diameter<br>203mm - 610mm |  |  |  |  |

| U.L. 555S CLASSIFIED<br>AT 250°F OR 350°F<br>DEPENDING UPON<br>MOTOR/OPERATOR<br>"SEE MOTOR/OPERATOR SCHEDULE                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard<br>16"<br>(406 mm)                                                                                                                                                      |
|                                                                                                                                                                                  |
| Options:<br>Electric Actuator, VAC<br>Pneumatic Actuator, 25 psi<br>Extended Sleeve, inches, 16" min.<br>Smoke Detector*<br>Ionization<br>Photoelectric<br>*Must have 24" Sleeve |
| <ul> <li>Micro-Switch Package</li> <li>Notes:</li> <li>Dampers are provided approx. 1/8" (3.2mm) smaller<br/>than given duct dimensions.</li> </ul>                              |
| Not recommended with blades running vertically.                                                                                                                                  |

Low Leakage Smoke Control Dampers shall be Model:S-RD-I by United Enertech. Single blade edge seal shall be of the pressure sensitive type for low leakage. Dampers shall be rated for leakage as to U.L. 555S / U.L.C. S112.1 rating shall be Class I with leakage not to exceed 8 cfm per sq. ft. at 4.0 inches static pressure. Linkage shall be jackshafted to the blade.

#### Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every 12 months or in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

| Job Name:   | MODEL S-RD-I     |                     |                         |  |
|-------------|------------------|---------------------|-------------------------|--|
| Location:   |                  |                     |                         |  |
| Architect:  |                  |                     |                         |  |
| Engineer:   | DRAWN BY:<br>MAB | DATE:<br>11-07-07   | REV. DATE:<br>9-12-11   |  |
| Contractor: | REV. NO.<br>5    | APPROVED BY:<br>SDC | DWG. NO.:<br><b>C-5</b> |  |