

## AIRFOIL BLADE SMOKE DAMPERS SUGGESTED SPECIFICATIONS

Furnish and install at all locations shown on plans Airfoil Blade Smoke Dampers. The blade shall be airfoil shaped, constructed of a dual skinned galvanized steel, 14 gauge equivalent thickness, on 6" maximum centers. Frame is to be a minimum of 16 gauge galvanized steel, roll formed into a structural hat shape channel. Frame seals shall consist of flexible, compression type stainless steel. Blade seals shall consist of composite silicone rubber capable of withstanding 450 F and shall be applied so that it compliments the airfoil design. Bearings shall be a bronze material with oil impregnated at time of manufacturing. The damper and actuator (specify electric/pneumatic) shall be rated to an elevated temperature of 250 F or 350 F. In addition, the damper must be factory supplied with an actuator and sleeve to comply with the requirements of UL 555S. Installation of Smoke Dampers shall be in conformance with NFPA 90A, NFPA 92A, UL 555, UL 555S, and manufacturer's installation instructions.

These dampers shall have been constructed and tested in compliance with UL Standard 555S, current editions. Leakage and airflow testing procedures are to be in accordance with AMCA Standard 500-D, current edition, in which the damper will have proven to open and close under specified static pressure and dynamic airflow conditions with a minimum of 4 inches static pressure at 2000 fpm. The pressure drop shall not be greater than **.16 inches water gauge at 2500 fpm** when tested by an independent laboratory. Each damper shall bear an approved UL label identifying its classification as a Leakage Rated Damper for use in Smoke Control Systems. Each damper shall have a leakage class rating of (specify class 1, 2), and shall include a label referring to the manufacturer's installation instructions. The damper's submittal literature and labeling shall include performance date.

Operators shall be electric type operating on 24vac or 120vac, 60 hz or pneumatic type operating on 20 psi instrument air pressure (specify one) and shall be spring return such that the damper will close upon power interruption. All wiring or piping material required to interconnect the damper actuator with detection and/or alarm or other systems shall be furnished by other trades and contractors as detailed elsewhere in the specification. Dampers shall be Leader **Model ASMD-1**(class 1), **Model ASMD-2**(class 2), or pre-approved equal.