**SUGGESTED SPECIFICATIONS**

08/30/2017

**TAMCO SERIES 8800 HEAVY-DUTY AIR-FOIL CONTROL DAMPER**

1. Extruded aluminum (6063-T5) damper frame shall not be less than 0.125” (3.17 mm) in thickness. Damper frame shall be 8” (203.2 mm) deep x 2" (50.8 mm), with duct mounting flanges on both sides of frame. Frame to be assembled using zinc-plated steel mounting fasteners. Welded frames shall not be acceptable.
2. Specifically engineered blade stops shall be located outside the air stream, providing a larger free area and reduced pressure drop. Blade stops shall be a continuous and integral part of the head/sill. Blade stops that protrude into the airstream or that are welded and caulked will not be acceptable.
3. Blades shall be maximum 8" (203.2 mm) deep extruded aluminum (6063-T5) air-foil profiles, with a minimum wall thickness of 0.081" (2.1 mm). All blades shall be symmetrically pivoted.
4. Blade seals shall be extruded silicone, secured in an integral slot within the aluminum blade extrusions and shall be mechanically fastened to prevent shrinkage and movement over the life of the damper. Adhesive or clip-on type blade seals will not be approved.
5. Frame seals shall be extruded silicone, secured in an integral slot within the aluminum frame extrusions and shall be mechanically fastened to prevent shrinkage and movement over the life of the damper. Metallic compression type jamb seals will not be approved.
6. Bearings shall be a dual bearing system composed of a bronze oilite inner bearing (fixed around a ¾" (19.05 mm) aluminum hexagon blade pivot pin), rotating within a bronze oilite outer bearing inserted in the frame. Single axle bearing, rotating in an extruded or punched hole shall not be acceptable.
7. Fixed aluminum hexagonal control shaft shall be ¾" (19.05 mm). It shall be an integral part of the blade axle, staked to the blade, extending beyond the edge of the frame at a measurement of 6" (152.4 mm). A field-applied control shaft shall not be acceptable.
8. Linkage hardware shall be aluminum and corrosion-resistant zinc-plated steel, installed in the frame side, out of the airstream, and accessible after installation. Linkage hardware shall be complete with cup-point trunnion screws to prevent linkage slippage. Trunnion bearings shall be bronze oilite. Linkage that consists of steel rubbing steel will not be approved.
9. Dampers shall be designed for operation in temperatures ranging from -40°F (-40°C) to 300°F (149°C).
10. Leakage for a 24" x 24" (610 mm x 610 mm) damper shall not exceed 3.9 cfm/ft² (19.8 l/s/m²) against 1 in. w.g.
 (0.25 kPa) differential static pressure.
11. Dampers shall be custom made to required size, without blanking off free area.
12. Dampers shall be opposed blade action or parallel blade action, as indicated on the plans.
13. Dampers shall be Flanged to Surface install type only.
14. Installation of dampers must be in accordance with TAMCO's current installation guidelines, provided with each damper shipment.
15. Field supplied intermediate structural support is required to resist applied pressure loads for dampers that consist of two or more sections in both height and width. *(See TAMCO Aluminum Damper Installation Guidelines.)*
16. Acceptable product shall be TAMCO Series 8800 Heavy-Duty Air-Foil Control Damper, as manufactured by T. A. Morrison & Co., Inc. (Tel: 1-800-561-3449, USA & Canada).

**OPTIONS** *(For each option listed, replace the specification lines above with their corresponding specification lines below.)*

**MR - MOISTURE RESISTANCE OPTION:**

1. Extruded aluminum (6063-T5) damper frame shall not be less than 0.125” (3.17 mm) in thickness. Damper frame shall be 8” (203.2 mm) deep x 2" (50.8 mm), with duct mounting flanges on both sides of frame. Frame shall be assembled using stainless steel screws. Welded frames shall not be acceptable.

8. Linkage hardware shall be aluminum and stainless steel, installed in the frame side, out of the airstream, and accessible after installation. Linkage hardware shall be complete with stainless steel cup-point trunnion screws to prevent linkage slippage. Trunnion bearing is bronze oilite. Linkage that consists of steel rubbing steel will not be approved.

**SW - SALT WATER RESISTANCE OPTION:**

1. Extruded aluminum (6063-T5) damper frame shall not be less than 0.125” (3.17 mm) in thickness. Damper frame shall be 8” (203.2 mm) deep x 2" (50.8 mm), with duct mounting flanges on both sides of frame. Aluminum frame shall be clear anodized to a minimum thickness of 0.7 mil (18 microns) deep. Frame shall be assembled using stainless steel screws. Welded frames shall not be acceptable.

3. Blades shall be maximum 8" (203.2 mm) deep extruded aluminum (6063-T5) air-foil profiles, with a minimum wall thickness of 0.081" (2.1 mm), clear anodized to a minimum thickness of 0.7 mil (18 microns) deep. All blades shall be symmetrically pivoted.

8. Linkage hardware shall be clear anodized aluminum and stainless steel, installed in the frame side, out of the airstream, and accessible after installation. Linkage hardware shall be complete with stainless steel cup-point trunnion screws to prevent linkage slippage. Trunnion bearing is bronze iolite. Linkage that consists of steel rubbing steel will not be approved.