**SUGGESTED SPECIFICATIONS**

**TAMCO SERIES 1000 MZ TWO-DECK MULTIZONE DAMPER**

1. Extruded aluminum (6063-T5) damper frame shall not be less than 0.080” (2.03 mm) in thickness. Damper frame shall be 4” (101.6 mm) deep x 1" (25.4 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. Blades shall be maximum 6" (152.4 mm) deep extruded aluminum (6063-T5) air-foil profiles with a minimum wall thickness of 0.06” (1.52mm). All blades shall be symmetrically pivoted.
3. Internal zone dividers (splitters) shall be extruded aluminum (6063-T6) profiles.
4. Blade seals shall be extruded EPDM, 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 Celcon inner bearing (fixed around a 7/16" (11.11 mm) aluminum hexagon blade pivot pin), rotating within a polycarbonate outer bearing inserted in the frame. Single axle bearing, rotating in an extruded or punched hole shall not be acceptable. Bearings are to be maintenance-free, requiring no lubrication.
7. Hexagonal control shaft shall be 7/16" (11.11 mm). It shall have an adjustable length and shall be an integral part of the blade axle. A field-applied control shaft shall not be acceptable. All parts shall be zinc-plated steel.
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 and a Celcon bearing between moving parts to reduce wear and increase longevity. Linkage that consists of metal rubbing metal will not be approved.
9. Dampers shall be designed for operation in temperatures ranging from -40°F (-40°C) to 212°F (100°C).
10. Leakage shall not exceed 3 cfm/ft² (15.2 l/s/m²) against 1 in. w.g. (.25 kPa) differential static pressure.
11. Dampers shall be custom made to required size, with blade stops not exceeding 1¼” (31.7 mm) in height. The blade stop shall be a continuous and integral part of the head/sill. Welded and caulked blade stops shall not be acceptable.
12. All sizes shall be inside frame dimensions.
13. Dampers shall be opposed blade or parallel blade action, as indicated on the plans.
14. The maximum spacing between decks shall be 24" (610 mm). Spacing between decks to be manufactured in 2" (51 mm) increments. All multizone dampers with spacing between decks that exceeds 2" (51 mm) shall be built with an 18 ga. galvanized steel sheet fastened with #8 x ½" Tek screws.
15. Dampers shall be Flanged to Duct install type only.
16. Installation of dampers must be in accordance with TAMCO's current installation guidelines, provided with each damper shipment.
17. Field-supplied intermediate structural support is required to resist applied pressure loads. *(See TAMCO Aluminum Damper Installation Guidelines.)*
18. Acceptable product shall be TAMCO Series 1000 MZ Two-Deck Multizone Damper, as manufactured by T. A. Morrison & Co., Inc. (Tel: 1-800-561-3449, USA & Canada).