

USask Master Specification Directions: The master specifications are intended to be incorporated into the Consultant's final, project specific specification package. The project specific specifications are expected to include any and all sections or portions of sections (Part 1, Part 2, Part 3) that are required to create a fully executable project specification. USask Master Specs only provide information that USask **requires** be a part of the final specification package. Components or sections not included in the Master USask Specifications may still be required for a complete, well-designed project. **It is the consultant's responsibility to ensure all specifications match USask requirements. Any deviations or revisions to any section included in the master specifications requires written consent from the USask Engineering department. The consultant is liable for any omissions, errors, or incorrect equipment or components supplied to site.**

The Master Specifications shall be used in conjunction with USask's Design Guidelines. Any conflicts shall be brought to the attention of USask Engineering staff for clarification.

Part 1 Products

1.1 MULTI-LEAF DAMPERS

- .1 Opposed blade type as indicated.
- .2 Extruded aluminum, interlocking blades, complete with extruded silicone seals, spring stainless steel side seals, extruded aluminum frame.
- .3 Bearings shall be comprised of a celcon inner bearing fixed to a 11.1 mm aluminum blade pin rotating within a polycarbonate outer bearing inserted in the frame, resulting in no metal to metal or metal to plastic contact.
- .4 Linkage: plated steel tie rods, brass pivots and plated steel brackets, complete with plated steel control rod.
- .5 Operator: by Controls.
- .6 Performance:
 - .1 Leakage: in closed position less than 8.6 L/s/m² of rated air flow at 250 Pa.
 - .2 Pressure drop: at full open position less than 5 Pa at 5.08 m/s.
- .7 Acceptable Product: Tamco Series 1500 ultra-low leakage.
- .8 Insulated aluminum dampers:
 - .1 Frames: insulated with extruded polystyrene foam with RSI 0.88.
 - .2 Blades: constructed from aluminum extrusions with internal hollows insulated with polyurethane or polystyrene foam, RSI 0.88.
 - .3 Acceptable product: Tamco Series 9000 ECT.

Part 2 Execution

2.1 INSTALLATION

- .1 Install where indicated.
- .2 Install in accordance with recommendations of SMACNA and manufacturer's instructions.

- .3 Seal multiple damper modules with silicon sealant.
- .4 Install access door upstream and adjacent to each damper. See Section 23 33 00- Air Duct Accessories.
- .5 Ensure dampers are observable and accessible.

END OF SECTION