

## SECTION 235113.16 - VENT DAMPERS

**TIPS:**

To view non-printing **Editor's Notes** that provide guidance for editing, click on Masterworks/Single-File Formatting/Toggle/Editor's Notes.

To read **detailed research, technical information about products and materials, and coordination checklists**, click on Masterworks/Supporting Information.

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

## A. Section Includes:

- 1. Barometric dampers.
- 2. Vent dampers.

## B. Related Requirements:

- 1. Section 235113.11 "Draft Control Fans" for draft inducer fans, venturi-draft inducer fans, mechanical-draft vent fans, vent exhaust fans, and combustion-air fans.
- 2. Section 235116 "Fabricated Breechings and Accessories" for listed, refractory-lined metal breechings and field-fabricated metal breechings.
- 3. Section 235123 "Gas Vents" for Type B and BW vents, Type L vents, and listed special gas vents.
- 4. Section 235133 "Insulated Sectional Chimneys" for listed chimney liners; listed building-heating-appliance chimneys; listed, refractory-lined metal chimneys; and field-fabricated chimneys.

## 1.3 ACTION SUBMITTALS

## A. Product Data: For each type of product.

## B. Shop Drawings: For each type of product.

- 1. Include plans, elevations, sections, and attachment details.
- 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

3. Detail fabrication and assembly of hangers and seismic restraints.
4. Include diagrams for power, signal, and control wiring.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Sample Warranty: For special warranty.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For draft control devices to include in emergency, operation, and maintenance manuals.

#### 1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of [**barometric dampers**] [**vent dampers**] that fail in materials or workmanship within specified warranty period.
  1. Failure includes failure due to corrosion.
  2. Warranty Period: [**Two**] [**10**] **<Insert number>** years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 BAROMETRIC DAMPERS

- A. [<Double click here to find, evaluate, and insert list of manufacturers and products.>](#)
- B. Damper Construction: High-temperature-enamel-painted steel damper and housing with galvanized-steel breeching connection. Adjustable counterweight with lock. Include knife-edge bearings that do not require lubrication.

#### 2.2 VENT DAMPERS

- A. [<Double click here to find, evaluate, and insert list of manufacturers and products.>](#)
- B. Damper Construction: Stainless-steel damper blade, shaft, and vent pipe with metal, prelubricated bearings.
  1. Electric motor sized to power damper open and closed in approximately 15 seconds in each direction. Power is off when damper is at rest.
  2. Comply with ANSI Z21.66.
- C. Controls:
  1. Control transformer.

2. Keyed wiring harness.
3. Damper end switch to prove damper is open.
4. Interlock with boiler to permit burner operation when damper is open.
5. Hold-open switch for troubleshooting boiler controls.

## 2.3 MOTORS

- A. Comply with NEMA designation, temperature rating, service factor, and efficiency requirements for motors specified in Section 230513 "Common Motor Requirements for HVAC Equipment."

## 2.4 CAPACITIES AND CHARACTERISTICS

- A. Damper:

1. Manufacturer: **<Insert manufacturer>**.
2. Model No.: **<Insert number>**.
3. Rated Appliance Input: **<Insert Btu/h (kW)>**.
4. Vent Size: **<Insert inches (mm)>**.
5. Electrical Characteristics:
  - a. Motor Horsepower: **<Insert value>**.
  - b. Volts: **[115] <Insert value>**.
  - c. Phase: Single.
  - d. Hertz: 60.
  - e. Full-Load Amperes: **<Insert value>**.
  - f. Minimum Circuit Ampacity: **<Insert value>**.
  - g. Maximum Overcurrent Protection: **<Insert amperage>**.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install listed components in a manner complying with the listing.
- B. Secure barometric dampers to breechings with hardware compatible with connected materials.
- C. Locate barometric and motorized vent dampers as close to draft hood collar as possible.
- D. Secure barometric and motorized vent dampers to appliances, breechings, or chimneys with hardware compatible with connected materials.

### 3.2 CONNECTIONS

- A. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

- B. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

END OF SECTION 235113.16