

SECTION 15550  
BREECHINGS, CHIMNEYS, AND STACKS

PART 1 - GENERAL

1.01 PROVISIONS INCLUDED

- A. The general provisions of the Contract, including General and Supplementary General Conditions, and Division 1 General Requirements, apply to work specified in this Section.

1.02 SUMMARY:

- A. This Section specifies double wall metal vents and accessories for gas-fired appliances.

1.03 SUBMITTALS:

- A. Product Data: Submit product data including materials, dimensions, weights, and accessories.
- B. Shop Drawings: Submit shop drawings including required clearances, assembly and installation instructions, and support of components.
- C. Quality Control Submittals:
  - 1. Certificates: Submit certificates of materials compliance with specified ASTM, UL, and ASHRAE requirements.
  - 2. Certificates: Submit Welders' Qualification Certificates.
  - 3. Certificates: Submit complete engineering report certifying that stacks meet the design wind and seismic loads.

1.04 QUALITY ASSURANCE:

- A. Welder's Qualifications: All welders shall be certified in accordance with AWS Standard D9.1, Specifications for Welding Sheet Metal.
- B. Codes and Standards:
  - 1. NFPA: Comply with NFPA 211 "Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances."
  - 2. UL: Comply with applicable portions of UL safety standards; provide products which have been UL listed and labeled.
  - 3. SMACNA: Comply with SMACNA Low Pressure Duct Standards for fabricated breeching and smokepipe.
  - 4. AWS: Comply with AWS Structural Welding Code for welders' qualifications, welding details, and workmanship standards.

5. ASHRAE: Comply with the ASHRAE Equipment Handbook, Chapter 27, for Chimney, Gas Vent, and Fireplace Systems, material requirements and design criteria.

## PART 2 - PRODUCTS

### 2.01 DOUBLE WALL METAL VENTS:

#### A. All Steel, Positive Pressure, Double Wall Vents:

1. Manufacturers: Subject to compliance with requirements, provide all steel, positive pressure double wall vents of one of the following:
  - a. Selkirk Metalbestos.
  - b. Van Packer
  - c. Stacks, Inc., Div of Air Management, Inc.
  - d. General Products Co, Inc.
2. Description: UL-labeled double wall metal stacks for use with building heating equipment burning gas, solid, or liquid fuels as described in NFPA 211.
3. Construction: 1" minimum air space between walls; inner jacket of Type (316 or 304) stainless steel, 0.035" thick; outer jacket of aluminum coated steel of the following thickness:
  - a. Size 10" to 24": 0.025" thick.
  - b. Size 28" to 48": 0.034" thick.
4. Accessories: UL-labeled tees, elbows, increasers, draft hood connectors, metal cap with bird barrier, exit cone, adjustable roof flashing, storm collar, support assembly, thimbles, fire stop spacers, and fasteners fabricated of similar materials and designs as vent pipe straight sections.

## PART 3 - EXECUTION

### 3.01 INSTALLATION OF DOUBLE WALL CONNECTORS, BREECHINGS, AND VENTS:

- A. Install all steel, positive pressure, double wall gas vents in accordance with manufacturer's installation instructions and UL listing. Maintain minimum clearances from combustibles specified in UL listing.
- C. Seal joints between sections of positive pressure vents in accordance with manufacturer's installation instructions, and using only sealants recommended by manufacturer.
- D. Support vents at intervals recommended by the manufacturer to support the weight of the vent and all accessories, without exceeding loading of appliances.

### 3.04 INSTALLATION OF DAMPERS

- A. Install barometric and thermostatically operated dampers in accordance with manufacturer's instructions. Locate as close to draft hood collar as possible.

3.05 ADJUSTING AND CLEANING

- A. Clean breechings internally during installation, to remove dust and debris. Clean external surfaces to remove welding slag and mill film. Grind welds smooth.

3.06 PROTECTION

- A. Temporary Closure: At ends of breechings and chimneys which are not completed or connected to equipment, provide temporary closure which will prevent entrance of dust and debris until installations are completed.

END OF SECTION 15550