



SAMPLE SPECIFICATION INSULATED POSITIVE PRESSURE CHIMNEY MODEL IPIC

PART 1 GENERAL

1.1 SCOPE

- A. The provisions of Section _____, Mechanical General Specifications apply to all work in this Section.
- B. This Section includes specifications for furnishing and installing Insulated Positive Pressure Chimneys.

1.2 SUBMITTALS:

Submit the following in accordance with Section _____:

- A. Catalog cuts
- B. Sizing calculations
- C. Installation drawings
- D. Installation instructions
- E. Sample of extended warranty

1.3 QUALITY ASSURANCE

A. APPLICABLE STANDARDS

All products furnished under the Section shall conform to the requirements of NFPA-211. Products shall be listed to UL-103 and shall carry the appropriate UL or cUL listing mark or label.

B. WARRANTY

Insulated Positive Pressure Chimneys shall be warranted by the manufacturer against defects in material and workmanship for a period of one (1) year, with the option of an extended twelve (12) years, from the date of the original installation. Any portion of the chimney repaired or replaced under warranty shall be warranted for the remainder of the original warranty period.

PART 2 PRODUCTS

2.1 INSULATED POSITIVE PRESSURE CHIMNEY

- A. The chimney shall be of the double-wall, factory-built type for use with equipment burning gaseous, liquid or solid fuels as described in NFPA-211, which produce flue gases exhausted at a temperature not exceeding 1000°F continuously and 1400° F intermittently.
- B. The stack and breeching sections shall be constructed of an inner and an outer wall with ceramic fiber insulation between the walls.

The inner wall shall be constructed of Type 304 stainless steel, .035" thickness for diameter 6" through 36" and .048 thickness for 38" through 48".

Optional: The inner wall shall be constructed of Type 316 stainless steel, .035" thickness for diameter 6" through 36" and .048 thickness for 38" through 48.

NOTE: If appliance is to be fired with No. 4 to No. 6 oil or coal, inner wall must be Type 316 stainless steel.

The outer wall shall be constructed of aluminized steel, .024" thickness for sizes 6" to 24" and .034" thickness for sizes 26" to 48".

Optional: The outer wall shall be constructed of Type (304 or 316) stainless steel, .024" thickness for all sizes.

Inner and outer walls shall be connected by means of spacer clips, which maintain the concentricity of the annular space and allow unobstructed differential thermal expansion of inner and outer walls.

- C. The chimney shall include a (1", 2", or 4") inch thickness of ceramic fiber insulation between the inner and outer walls.
- D. All chimney parts exposed to the atmosphere shall be protected by one (1) coat of corrosion and heat resistant primer and one (1) coat heat resistant paint. Paint shall be furnished and applied by installer.

Optional: All chimney parts exposed to the atmosphere shall be Type 304 stainless steel.

NOTE: When fumes may be present in the vicinity of the chimney, Type 316 stainless steel outer wall is recommended.

- E. All chimney supports, roof penetrations, terminations, appliance adapters, drain fittings and expansion joints required to install the chimney shall be included.
- F. Roof penetration pieces shall be UL listed products of the chimney manufacturer. Where roof is pitched (up to 12 :12), roof penetration pieces shall be of the pitched type so that it is not necessary to provide a horizontal roof curb.

NOTE: If roof pitch exceeds 12 :12, a curb must be provided.

- G. All inner pipe joints shall be held together by means of formed vee bands and sealed with P077 Silicone Sealant for flue gas temperatures up to 600° F, or P071 High Temperature Sealant for flue gas temperatures over 600° F.

Where exposed to weather, the outer closure band shall be sealed (with the same sealant as the inner joint) to prevent rainwater from entering the space between the inner and outer walls.

Nuts for the inner and outer bands shall be retained by means of a free-floating cage to allow easy alignment.

Screws shall be of the hex head type with shoulder stops and tapered “lead-in” threads for easy starting.

- H. Chimneys shall terminate three feet above the roof or as required by local codes.

2.2 AVAILABLE MANUFACTURERS

Chimney shall be Model IPIC Insulated Pressure Industrial Chimney, manufactured by Metal-Fab Inc.

PART 3 EXECUTION

- A. Store delivered materials inside, out of the weather. Protect materials from accidental damage or vandalism.
- B. Installation shall conform to the manufacturer’s installation instructions, UL listing and state or local codes.

- C. Support chimney from building structure using rigid structural shapes for attachment of fixed point supports (Plate Support Assembly). Anchor supports to structure by welding, bolting, steel expansion anchors, or concrete inserts. Size of structural shapes shall be in accordance with manufacturer's recommendations.
- D. Coordinate installation of dampers or fans. Dampers or fans shall be supported independently from the chimney sections. Protect chimney from twist or movement due to fan torque or vibration.
- E. Protect incomplete chimney installations by attaching temporary closures over open ends of sections.
- F. Clean all chimneys and breechings of dust and debris prior to final connection to appliances.
- G. Installation shall conform to manufacturer's installation instructions.