

**BREECHINGS, CHIMNEY, AND STACKS FOR CONDENSING APPLIANCES**  
**SECTION 23 51 23**

**PART 1- GENERAL**

1.1 SUMMARY

- A. Section Includes:
1. Venting for the removal of products of combustion for Category II, III, IV gas burning appliances

1.2 REFERENCES

- A. Underwriters Laboratories (UL):
1. UL1738
- B. National Fire Protection Association (NFPA):
1. NFPA 54 - National Fuel Gas Code
  2. NFPA 211 – Standard for Chimneys, fireplaces, Vents, and Solid Fuel-Burning Appliances.

1.3 QUALITY ASSURANCE

- A. Comply with NFPA 54
- B. Must install duct in accordance to manufacturer's listings and installation instructions.
- C. Components coming in contact with the products of combustion shall carry the appropriate UL or cUL listing, mark or label.

1.4 WARRANTY

- A. Condensing Appliance vent listed to UL1738 shall have a limited lifetime warranty to begin at the date of installation. Any portion of the vent repaired or replaced under warranty shall be warranted for the remainder of the original warranty period.

**PART 2- PRODUCTS**

2.1 AVAILABLE MANUFACTURERS

- A. Listed Double-Wall vent for condensing appliances, as manufactured by Metal-Fab, Inc.

2.2 LISTED VENTING FOR CONDENSING APPLIANCES

- A. The condensing appliance vent shall be double-wall for use with Category II natural draft appliances and Category III or IV positive pressure appliances.
- B. Maximum temperature shall not exceed 550° F (288° C).
- C. Vent shall be listed for an internal static pressure of 6" w.g. and tested to 15" w.g. for diameters 6-36 inches and 10" w.g. for diameters 3-5.
- D. Vent shall be constructed of a material tested to UL1738, .015 thickness for 3"-12" diameters, .024 thickness for 14" to 24" diameters, and .035 thickness for 26" to 36" diameters.
- E. Outer casing shall be constructed of aluminized steel, type 430, 304, 316 stainless steel of .018 thickness for 3" to 12" diameters, .024 thickness for 14" to 24" diameters, and .035 thickness for 26" to 36" diameters.

**PART 3-EXECUTION**

3.1 STORAGE AND CONSTRUCTION

- A. Protect materials from accidental damage.
- B. All supports, roof or wall penetrations, terminations, appliance connectors and drain fittings required to install the vent system shall be included.
- C. Joint assembly utilizes flanged mating surfaces for diameters 6" – 36." P070 sealant will be used on the flange surface. Flanges are joined with a vee band secured by tightening draw bolts, P070 sealant will be applied to the channel of the vee band prior to installation. Diameters 3-5 inch utilize a snap-lock, gasketed connection.
- D. Where exposed to weather, the outer closure band shall be sealed to prevent moisture from entering the space between the walls.
- E. All parts exposed to the weather shall be protected by one (1) coat of corrosion and heat resistant base primer and one (1) coat of heat resistant paint unless constructed of 430, 304 or 316 stainless steel.
- F. Vent shall terminate in accordance with installation instructions and local codes.
- G. Installation shall conform to manufacturers installation instructions.