

BREECHINGS, CHIMNEY, AND STACKS FOR CONDENSING APPLIANCES
DIVISION 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, Model FCS/CG 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 15 inch w.g. and tested to 37.5 inch w.g. for diameters 3 inch - 36 inch.
- D. Vent shall be constructed of UNS S44735 (i.e. AL29-4C) material tested to UL1738, .015 thickness for 3 inch - 12 inch diameters, .024 thickness for 14 inch to 24 inch diameters, and .035 thickness for 26 inch to 36 inch diameters.
- E. Outer casing shall be constructed of aluminized steel, type 430, 304, 316 stainless steel of .018 inch thickness for 3 inch to 12 inch diameters, .024 inch thickness for 14 inch to 24 inch diameters, and .035 thickness for 26 inch to 36 inch diameters.
- F. Joint assembly utilizes flanged mating surfaces, with a self-guiding sleeve for diameters 6 inch – 24 inch. P070 sealant will be used on the flange surface and in the vee band. Flanges are joined with a vee band secured by tightening draw bolts. Diameters 3 inch - 5 inch utilize an overlapping, Viton gasket joint connection.

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. Where exposed to weather, the outer closure band shall be sealed to prevent moisture from entering the space between the walls.
- D. 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.
- E. Vent shall terminate in accordance with installation instructions and local codes.
- F. Installation shall conform to manufacturer's installation instructions.