



MODEL DWC FLEXIBLE GAS VENT CONNECTOR AND GAS VENT SEGMENT INSTALLATION INSTRUCTIONS

CAUTION: WEAR GLOVES WHEN HANDLING SHEET METAL PARTS WITH SHARP EDGES.

Selkirk Model DWC Flexible Gas Vent Connector/Segment is an air-insulated double wall flexible venting product with comparable insulating value to Type B Gas Vent. Model DWC is Listed for two applications.

1. **VENT CONNECTOR:** Model DWC may be used as a connector for Listed gas fired appliances equipped with draft hoods and other appliances listed for use with Type B Gas Vent. Model DWC may be used where Type B Gas Vent Connectors are required. (See Section 1).
2. **VENT SEGMENT:** Model DWC may be used (unenclosed) as a segment of standard Type B Gas Vent system in attics or crawl spaces. (See section 2).

Model DWC may be sized in accordance with tables applicable to systems with Type B gas vent connectors, However, **DO NOT ENCLOSE MODEL DWC.**



WARNING

Failure to follow the installation instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the Phone Number listed on the instructions, 1-800-433-6341 or visit www.selkirkcorp.com

CAUTION - RISK OF FIRE - DO NOT ENCLOSE. INTENDED FOR USE AS A VENT CONNECTOR OR FLEXIBLE SEGMENT OF VENT SYSTEM FOR UNENCLOSED PORTIONS OF INSTALLATIONS ONLY. Do not fully enclose or pass through combustible areas such as walls, ceilings or floors. Maintain specified minimum airspace clearance-to-combustibles.

General:

- 1) Selkirk Model DWC Flexible Connector system is designed to simplify connection between gas burning appliances and Type B Gas Vent systems by eliminating elbows and height interference sometimes associated with fixed lengths of rigid single wall or Type B Gas Vent. Individual lengths are provided with the same type of joint connector system as Selkirk Type B Gas Vent, permitting simple attachment. Adaptation to other Type B Gas Vent may be accomplished by utilizing either Selkirk's Universal Female B-Vent Adapter or Universal Female Flexible Connector. (See Section 3).
- 2) To size the connector system, follow Selkirk Chimney and Gas Vent Sizing Handbook and/or other approved engineering design practices such as the National Fuel Gas Code (NFPA 54). Also check local code requirements.
- 3) In using Model DWC, overall considerations should be given to the following:
 - a) Make short straight runs where possible.
 - b) Make no unnecessary bends.
 - c) Make no bends greater than 90 degrees.
 - d) Make bends as smooth as possible with no dips or sags.
 - e) Install with at least a 1/4" per foot (20mm/m) rise.
- 4) Selkirk Model DWC Flexible Connector is Listed by Underwriters Laboratories (UL) for 1" (25mm) airspace clearance-to-combustibles in an unenclosed installation. THIS PRODUCT SHOULD NOT BE FULLY ENCLOSED OR PASS THROUGH A COMBUSTIBLE AREA SUCH AS A CEILING, WALL OR ROOF JOIST.
- 5) Use Selkirk Model DWC (combination) Wall/Ceiling Support Spacers (DWC-SS) as necessary to assure correct clearances are maintained (see Fig. 1).
- 6) Never cut or modify the DWC length. Where possible, choose lengths which provide for proper overall length. If necessary, however, DWC lengths may be slightly compressed to obtain proper length (see Fig. 2). Extra care must be observed when bending the DWC in the compressed state. Use only Model DWC connector parts. Do not substitute other flexible pipe material.
- 7) Joint connection design eliminates the need for screws at joints between flexible sections and/or B-Bent sections. However short (maximum 1/4" (6mm)) sheet metal screws may be used if desired. Screws should not pierce or deform the B-Vent but may pierce the connector. Use sheet metal screws as necessary to securely fasten flexible length or draft hood connector to the appliance outlet.

SECTION 1

DWC AS A VENT CONNECTOR - SINGLE APPLIANCE SYSTEM

- 1) Determine the approximate length and the path of the connector required to attach to the B-Vent system and the appliance being vented.
- 2) Select a length or lengths of flexible connector sufficient to extend from the Type B Gas Vent (which should be protruding into the appliance room) to the appliance to be connected. If the inlet of the existing Type B Gas Vent system is not compatible with the male end of the flexible connector, use a Selkirk Universal Female B-Vent Adapter or a Universal Female Flexible Connector which are UL Listed and designed to adapt to most manufacturer's Type B Gas Vent (See Section 3). Insert the outlet (male) end of the Flexible Adapter into the inlet of the gas vent until it fully engages. Use #8, 1/4" sheet metal screws to secure in place. (See Figure 1).
- 3) If local codes specify use of a "drip tee", a fixed adjustable wye or a tee maybe included to make the connection to the B-Vent. Model DWC may also be used to connect to the round inlet of an oval B-Vent tee if desired (See Figures 4 and 5).
- 4) Once securely attached to the B-Vent, gently bend the flexible connector in the direction of the appliance to which it will be attached. (Be careful not to make any abrupt or sharp bends or create any bends greater than 90 degrees).
- 5) Attach the inlet (female) end of the flexible connector directly to the appliance draft hood or flue collar (if conditions and local codes permit). If necessary, a draft hood connector may be used between the draft hood/flue collar and the connector inlet.
- 6) If the flexible connector is too long, do not cut to length. Instead, compress it to an appropriate length as noted in Figure 2.
- 7) After making final connections, check the system for soundness of joint attachment and proper 1" airspace clearance-to-combustibles. Install wall/ceiling support spacers as necessary to eliminate sags and/or assure proper clearances.

DWC AS A VENT CONNECTOR -MULTIPLE APPLIANCE SYSTEM

- 1) To common vent (connect to more than one appliance), select and install a fixed or adjustable wye or tee at the base (inlet) of the Type B Gas Vent system, along with appropriate increasers (if necessary) at the inlets. (See Figure 6).
- 2) Remember to reference Selkirk Chimney and Gas Vent Sizing Handbook and/or local code requirements to obtain the correct sizes for the connectors and common vent.
- 3) After selecting and installing the appropriate tee or wye assembly at the inlet of the gas vent, connection of the individual appliances is accomplished in the same manner as described above for a single appliance connector system.

AFTER COMPLETING INSTALLATION OF CONNECTOR AND VENT SYSTEM, CHECK FOR PROPER VENT OPERATION. REFER TO GAS VENT INSTALLATION INSTRUCTIONS AND/OR Z223.1/NFPA 54 FOR GUIDELINES ON HOW TO CHECK FOR PROPER OPERATION.

SECTION 2

DWC AS AN UNENCLOSED SEGMENT OF A TYPE B GAS VENT SYSTEM IN ATTICS OR CRAWL SPACES (SEE FIG. 7)

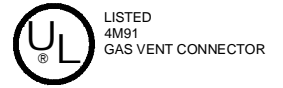
Model DWC may be used as a segment of a standard Type B Gas Vent installation in attics or crawl spaces (only) provided the installation complies with the following criteria.

- 1.) The DWC must never pass through or penetrate a wall, ceiling, floor or roof joist. (Such is to be done only with rigid lengths of B-Vent).
- 2.) The DWC must never be fully enclosed.
- 3.) If installed in an attic, the B-Vent portion, penetrating the attic floor (to which the DWC will be attached) must extend a minimum of three inches above the attic floor.
- 4.) If installed in an attic, the B-Vent portion attached above the model DWC must be supported and stabilized using the method detailed in Figure 7 or by other generic methods as shown in Figures 7a through 7d.

5.) If installed in a crawl space, rigid B-Vent must extend through all penetration locations (wall, ceiling, floor) by at least 3 inches and must be supported/stabilized by using a Support Assembly or by other generic methods as shown in Figure 7 or figures 7a through 7d.

*If local code requires an attic insulation shield to be installed above the attic floor, the DWC B-Vent Segment must extend above the shield.

Simpson DuraVent
 American Metal Products Company
 Metal-Fab
 Hart & Cooley
 General Products Company (Air Jet)
 Household HVAC/Eljer HVAC
 Mitchell Metal Products
 White Metal Products



The appliance end is fitted with an appliance connector and the outlet end is fitted with a Universal Adapter for use on other Type B Vent systems. It is available in 3" and 4" diameters, both having 2', 3' and 4' lengths. For details on how to install, refer to Type B Gas Vent Female Universal Adapter Installation Instructions supplied with these parts.

**SECTION 3
 UNIVERSAL FLEXIBLE CONNECTOR**

An optional Universal Flexible Connector is available for use in connecting to vents manufactured by:

