

**MORE PRODUCTS  
SERVING MORE  
APPLICATIONS**

**LEADERSHIP IN  
THE CHIMNEY &  
EXHAUSTING  
INDUSTRY  
SINCE 1944**

**VAN-PACKER<sup>®</sup> CO., INC.**

# DW and DWplus

## Double-Wall Chimney and Breeching Systems

**Description/Application:** Double wall air or fiber insulated systems for venting boilers, kilns, cooking equipment (grease ducts), emergency generators, coffee roasters, etc.

**Diameters Available:** Standard sizes are 6" to 48" I.D. in two-inch increments

**Vent Pressures:** Negative, Neutral, and Positive (*up to 60" water column positive*)

**Continuous Operating Temperatures:** Dual listings of 1000°F and 1400°F, 500°F for grease duct applications

**Intermittent Operating Temperatures:** Dual listings of 1400°F and 1800°F, 2000°F for grease duct applications

**Fuel Types / Effluents:** LP gas, natural gas, #2, #4\*, #5\*, or #6\* fuel oil, wood\*, coal\*, diesel fuels, grease vapors, caustic fumes

*\*It is recommended that 316 S.S. liner be specified for systems where these fuel types are used. Fuel type or effluent not shown? Contact Van-Packer for assistance with your application.*

**Materials of Construction:**

Liners (I.D.): 6" to 36" = 20 gauge 304 or 316 stainless steels

Liners (I.D.): 38" to 48" = 18 gauge 304 or 316 stainless steels

Shells (O.D.): 8" to 26" = 24 gauge aluminized steel, 304 or 316 stainless steels

Shells (O.D.): 28" to 56" = 20 gauge aluminized steel, 304 or 316 stainless steels

**Insulation:** 1" Air space (DW) and 1" to 4" mineral wool fiber (DWplus series)

**Joint Method:** The liners are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained. The outer shells are joined by flanged bands to ensure environmental protection.

**Clearance to Combustibles:**

DW: 1000°F applications = 4" and for 1400°F applications = 6"

DWplus series: 1000°F applications = 2" and for 1400°F applications = 4"

*For grease duct applications see installation instructions*

**Clearance to Non-Combustibles:**

DW & DWplus series: 6" to 18" I.D. for both 1000°F and 1400°F applications = 2"

DW: 20" to 48" I.D. for both 1000°F and 1400°F applications = 4"

DWplus series: 20" to 48" I.D. for 1000°F applications = 2" and for 1400°F applications = 4"

*Clearance in a non-combustible interior chase shall be as necessary for installation or access.*

**Application References & Listings:** c UL us 103 & UL 1978 / ULC S662 file number MH11435, NFPA 31, 34, 37, 54, 68, 85A, 85B, 85D, 96, and 211

# GZ

## Two-Hour Fire Rated Zero Clearance Grease Duct

**Description/Application:** Double wall ceramic fiber insulated duct for the removal of smoke and grease effluent from commercial, industrial, institutional, and similar cooking applications. Model GZ grease duct is an alternate to a specified hourly rated fire resistive shaft enclosure.

**Diameters Available:** Standard sizes are 6" to 10" I.D. in one-inch increments and 10" to 36" I.D. in two-inch increments

**Continuous Operating Temperature:** 500°F

**Intermittent Operating Temperature:** 2000°F

**Fuel Types / Effluents:** LP gas, natural gas, \*wood, \*coal *\*It is recommended that 316 stainless steel liner be specified when using these types of fuels. Fuel type or effluent not shown? Contact Van-Packer for assistance with your application.*

**Materials of Construction:**

Liners (I.D.): 6" to 36" = 20 gauge 304 or 316 stainless steels

Shells (O.D.): 14" to 26" = 24 gauge aluminized steel, 430, 304, or 316 stainless steels

Shells (O.D.): 28" to 44" = 20 gauge aluminized steel, 430, 304, or 316 stainless steels

**Insulation:** Ceramic fiber insulation in a 4" annular space

**Joint Method:** The liners are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained. The outer shells are joined by flanged bands to ensure environmental protection.

**Clearance to Combustibles:** 0"

**Clearance to Non-Combustibles:** 0"

**Application References & Listings:** ETL listing to standards UL 1978 / ULC S662, UL 2221 / ULC S144, ASTM E814 (through penetration firestops) file number VPC/FMF 120-01 USA, VPC/FMF 120-02 CANADA, NFPA 96

# CS & CSplus and MODEL MW

## Special Gas Vent for Condensing Chimney and Breeching Systems

**Description/Application:** Double wall air or fiber insulated (Models CS & CSplus) and single wall (Model MW) corrosion resistant systems for venting gas appliances.

**Diameters Available:** Standard sizes are 4" to 10" I.D. in one-inch increments and 10" to 36" I.D. in two-inch increments.

**Vent Pressures:** Negative, Neutral, and Positive (*up to 40" water column positive*)

**Continuous Operating Temperature:** 550°F

**Fuel Types / Effluents:** LP gas, natural gas

**Materials of Construction:**

Liners (I.D.): 4" to 24" = 24 gauge \*stainless steel

Liners (I.D.): 26" to 36" = 20 gauge \*stainless steel

Shells (O.D.): CS (1" Air) 6" to 38" = 24 gauge aluminized or 430 stainless steel

Shells (O.D.): CSplus Series 6" to 26" = 24 gauge aluminized or 430 stainless steel

Shells (O.D.): CSplus Series 28" to 44" = 20 gauge aluminized or 430 stainless steel

*\*VP1738 S.S., VP1738A S.S. & other corrosion resistant alloys available. Contact Van-Packer for details.*

**Insulation:** 1" Air space (CS) and 1" to 4" mineral wool fiber (CSplus series)

**Joint Method:** The liners are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained. The outer shells are joined by flanged bands to ensure environmental protection.

**Models CS and CSplus Clearance to Combustibles:** 2"

**Models CS and CSplus Clearance to Non-Combustibles:** 0"

**Model MW Clearance to Combustibles:**

Vertical Installations	
Section ID	Minimum Clearance
4" – 12"	2"
14" – 24"	4"
26" – 36"	6"

Horizontal Installations	
Section ID	Minimum Clearance
4" – 12"	3"
14" – 24"	4"
26" – 36"	6"

*Model MW is not designed to be installed in a fully enclosed combustible enclosure. Can only be enclosed on two sides with combustible materials.*

**Model MW Clearance to Non-Combustibles:** 0"

**Application References & Listings:** UL 1738 / ULC S636 file number MH45778, NFPA 54 and 211

# SW

## Single Wall Fume Hoods, Particle Containment, Breeching Systems

**Description/Application:** Single wall exhaust systems for venting caustic air, fume hoods, particle containment, breeching for boilers and heating appliances.

**Diameters Available:** Standard sizes are 6" to 48" I.D. in two-inch increments

**Vent Pressures:** Negative, Neutral, and Positive (*up to 60" water column positive*)

**Continuous Operating Temperature:** 1400°F

**Intermittent Operating Temperature:** 1800°F

**Fuel Types / Effluents:** LP gas, natural gas, #2, #4\*, #5\*, or #6\* fuel oil, wood\*, coal\*, diesel fuels, grease vapors, caustic fumes. *\*It is recommended that 316 S.S. liner be specified for systems where these fuel types are used.*

*Fuel type or effluent not shown? Contact Van-Packer for assistance with your application.*

**Materials of Construction:**

Liners (I.D.): 6" to 36" = 20 gauge 304 or 316 stainless steels

Liners (I.D.): 38" to 48" = 18 gauge 304 or 316 stainless steels

**Joint Method:** The liners are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained.

**Clearance to Combustibles:** As required by local codes

**Clearance to Non-Combustibles:** As required by local codes

**Application References & Listings:** None

# Type B Gas Vent

## Gas Vent for Appliances Equipped with Draft Hoods / Diverters

**Description/Application:** Double wall air or fiber insulated corrosion resistant systems for venting gas appliances equipped with draft hoods or diverters and other Category I appliances listed for use with Type B gas vents.

**Diameters Available:** Standard sizes are 3" to 8" I.D. in one-inch increments and 10" to 30" I.D. in two-inch increments. Insulated B-Vent sizes are available in 4" to 14" I.D. only.

**Vent Pressures:** Negative and Neutral

**Continuous Operating Temperature:** 470° F

**Fuel Types / Effluents:** LP gas, natural gas

**Materials of Construction:**

Liners (I.D.): Aluminum

Shells (O.D.): Galvalume and Galvanized

**Insulation:** 1/4" Minimum air space (standard B-Vent) and 1/2" fiberglass for insulated version

**Joint Method:** Smaller diameter sections are joined by twist-lock or snap-lock joints. Larger diameters slip together and require sheet metal screws to secure the joint.

**Clearance to Combustibles:** 1"

**Clearance to Non-Combustibles:** As required by local codes and as permitted by the authority having jurisdiction, CSA B149.1, CSA B149.2, NFPA 211, NFPA 54

**Application References & Listings:** UL 441 / ULC S605



## Engineered Chimneys

**Description/Application:** Our engineers will provide specific designs including sizing, structural, corrosion, and thermal analysis to exhaust products of combustion as specified. Van-Packer's engineers can design unique stacks; for example, a single freestanding stack containing multiple chimney systems.

**Diameters Available:** As specified

**Vent Pressures:** As specified

**Continuous Operating Temperatures:** As specified

**Intermittent Operating Temperatures:** As specified

**Fuel Types / Effluents:** As specified

**Materials of Construction:** As specified

**Insulation:** As specified

**Joint Method:** As specified

**Clearance to Combustibles:** As specified

**Clearance to Non-Combustibles:** As specified

**Application References & Listings:** As specified

# PRODUCT SELECTION GUIDE

## APPLICATIONS

The following chart represents many typical applications for each of our standard products. If you're not sure about the vent for your particular application, contact our technical service department and let us help you determine an effective affordable solution.

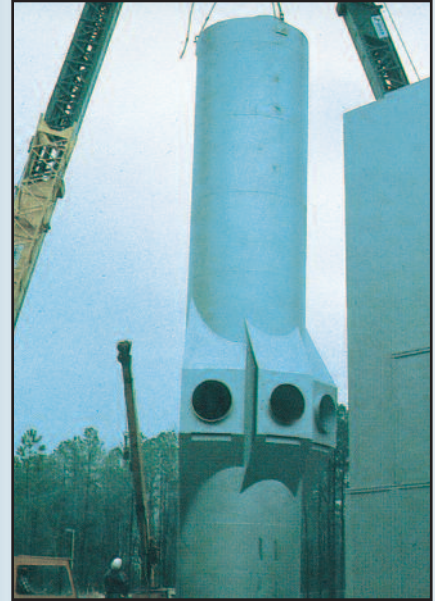
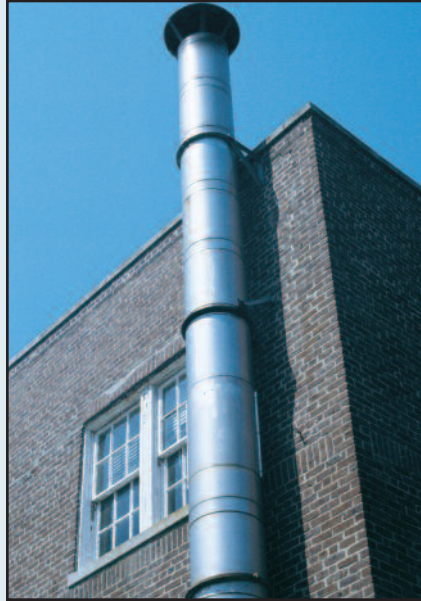
	Model DW & DWplus - 304	Model DW & DWplus - 316	Model CS, CSplus, MW	Model GZ	Model SW	Type B-Vent
Gas Appliances - Category I (Negative Pressure, Non-Condensing) Maximum Operating Temperature 470° F						●
Gas Appliances - Category I (Negative Pressure, Non-Condensing) Maximum Operating Temperature 550° F			●			
Gas Appliances - Category II (Negative Pressure, Condensing) Maximum Operating Temperature 550° F			●			
Gas Appliances - Category III (Positive Pressure, Non-Condensing) Maximum Operating Temperature 550° F			●			
Gas Appliances - Category IV (Positive Pressure, Condensing) Maximum Operating Temperature 550° F			●			
Gas, #1 or #2 Oil Appliances (Negative or Positive Pressure) Maximum Operating Temperature 1400° F	●					
Digester Gas & #3 to #6 Oil Appliances (Negative or Positive Pressure) Maximum Operating Temperature 1400° F		●				
Solid Fuel Appliances (Negative or Positive Pressure) Maximum Operating Temperature 1400° F		●				
Gas or Diesel Engine/Generator & Turbine/Microturbine Exhaust Maximum Operating Temperature 1400° F	●					
Grease Duct - Type I Hoods / Cooking Applications Reduced Clearance, Non-Fire Rated	●					
Grease Duct – Type I Hoods / Cooking Applications 0" Clearance, 2 Hour Fire Rated				●		
Steam, Heat, Fumes – Type II Hoods & Non-Cooking Applications					●	

This guide reflects general recommendations. Other Van-Packer Models and liner/shell material options not designated above may also be appropriate for your application. Contact our technical service department to discuss your venting requirements.

### Model EC – Engineered Chimney

Do you need a unique chimney? Perhaps you require a free standing stack or a multiflue chimney (several chimneys within a structural enclosure). These chimneys can be professionally engineered from foundation all the way through to termination. Contact our technical service department today and start your venting solution!

# DESIGN, DEVELOPMENT, AND SUPPORT LEADERSHIP!



From product design and development, to follow-up service and support, the entire Van-Packer organization is dedicated to solving your chimney and exhaust problems. Our experience has led to a way of doing business that is second to none.

Our services include:

- Sizing for all applications
- CAD design
- Corrosion analysis and lining recommendations
- Thermal analysis
- Mid-flue temperature analysis
- BTU heat loss per foot
- Seismic calculations and structural analysis
- Field inspection and repair recommendations for existing chimneys

So if you need to exhaust laboratory hoods, kitchen hoods, boilers, heat recovery systems, engines/turbines, kilns, incinerators, or any other application, we are ready to be of service to you.

## **VAN-PACKER<sup>®</sup> CO., INC.**

**888-VPSTACK (888-877-8225)**

309-895-2311 • Fax 309-895-3891

302 Mill Street • Box 307 • Buda, Illinois 61314

www.vpstack.com • email: vptech@vpstack.com