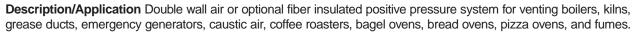
MORE PRODUCTS SERVING MORE APPLICATIONS

LEADERSHIP IN
THE CHIMNEY &
EXHAUSTING
INDUSTRY
SINCE 1944





Double-Wall Positive Pressure Chimney and Breeching Systems



Maximum Temperature Continuous Firing Dual listings of 1000° and 1400°F

Maximum Temperature Intermittent Firing Dual listings of 1400° and 1800°F; 2000°F for grease duct applications

Fuel LP gas, natural gas, #2, #4*, #5*, or #6* fuel oils, wood*, coal*, diesel fuels, grease vapors, caustic fumes, and particles. (*It is recommended that 316 stainless steel liner be specified when using these types of fuels.)

Construction Diameters:

Inner liner 6" - 36"ID = 20-gauge stainless steel

Inner liner 38" - 48"ID = 18-gauge stainless steel

Outer shell 8" – 26"OD = 24-gauge aluminized, 304 or 316 stainless steel

Outer shell 28" – 56"OD = 20-gauge aluminized, 304 or 316 stainless steel

Insulation DW - One inch air space between shell and liner; DWplus - One, two, three, or four inch fiber insulation

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.

Diameters Available 6" through 48" in two-inch increments are standard.

Clearance To Combustible

DW - 1000°F applications = 4" 1400°F applications = 6" Grease Duct:

DWplus - 1000°F applications = 2" 1400°F applications = 4" See Installation Instructions

Clearance To Non-Combustibles

Model DW and DWplus: 6" - 18"ID for 1000°F and 1400°F applications = 2"

Model DW: 20" - 48"ID for 1000°F and 1400°F applications = 4"

Model DWplus: 20"- 48"ID for $1000^{\circ}F = 2$ " and for $1400^{\circ}F = 4$ "

Application References & Listings c UL us 103 file number MH11435, NFPA 31, 34, 37, 54, 68, 85A, B, D, 96, and 211.



Double-Wall Condensing Chimney and Breeching Systems

Description/Application Double wall corrosion resistant, for venting negative or positive pressure and gas appliances. Categories II, III and IV venting.

Maximum Temperature Continuous Firing 550°F

Maximum Temperature Intermittent Firing 550°F

Fuel LP gas, natural gas

Construction Standard Jacket materials: 24-gauge aluminized steel or 24-gauge type 430 stainless steel, inner liner 24-gauge type VP1738 stainless steel alloy

Insulation One inch air space

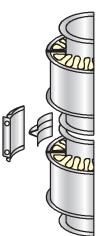
Joint Method The liners are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained. The outer shells are joined by smooth bands to ensure environmental protection

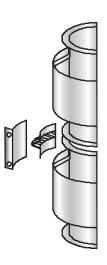
Diameters Available 4" through 10" in one-inch increments and 10" through 24" in two-inch increments are standard

Clearance To Combustibles 2"

Clearance To Non-Combustibles 0"

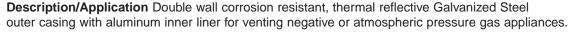
Application References & Listings c UL us 1738 file number MH45778, NFPA 54 and 211







For Venting Atmospheric Gas Fired Appliances



Maximum Temperature Continuous Firing 470° F

Maximum Temperature Intermittent Firing 470° F

Fuel LP gas or natural gas

Construction Outer casing of galvalume and galvanized, inner liner of aluminum both 24 & 26 gauge

Insulation

Standard: Outer casing and inner liner separated by an annular air space of 1/2" Insulated: Outer casing and inner liner separated by 1/2" blanket of fiberglass insulation for sizes 4" - 14" diameter

Joint Method

3" - 14" are jointed by inserting mating ends together and twisting clockwise 16" - 30" have a slip joint involving sheet metal screws for securing joints

Diameters Available 3" through 30" diameters

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

Application References & Listings UL441 file number MH 66M3, ULC file number CMH695, CMHC acceptance number 6952



Single Wall Fume Hoods, Particle Containment, Breeching Systems

Description/Application A single wall Stainless Steel exhaust system for venting caustic air, fume hoods, particle containment, breeching for boilers and heating appliances.

Maximum Temperature Continuous Firing 1400°F

Maximum Temperature Intermittent Firing 1800°F

Fuel LP gas, natural gas, #2, #4*, #5*, or #6* fuel oils, wood*, coal*, caustic fumes, vapors, and particle containment. (*It is recommended that 316 stainless steel be specified when using these types of fuels.)

Construction Diameters:

6" - 36"ID = 20-gauge type 304 or 316 stainless steel 38" - 48"ID = 18-gauge type 304 or 316 stainless steel

Insulation None

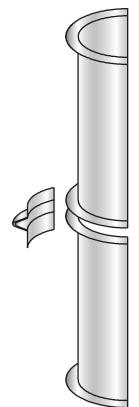
Joint Method All components are flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained.

Diameters Available 6" through 48" in two-inch increments are standard. Optional diameters available upon request.

Clearance To Combustibles As required by local codes

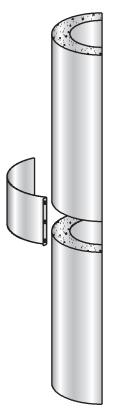
Clearance To Non-Combustibles As required by local codes

Application References & Listings None





Family of Chimney and Exhaust Systems



Description/Application Standard components are cylindrical built products made of acid resistant refractory liners encased in steel jackets. The refractory material is centrifugally cast in various lengths making it easy to configure for any application. Thermal and corrosion analysis may require varying wall thicknesses, additional insulation thickness, a membrane liner, specialty coatings, or refractory compositions. Applications include boilers, furnaces, incinerators, fireplaces, wood and coal burning appliances, kilns, diesel / gas engines, heat recovery systems, process equipment, smoke venting and fume incineration.

Maximum Temperature Continuous Firing standard material 1800°, optional 3100°F **Maximum Temperature Intermittent Firing** standard material 2000°, optional to 3100°F

Fuel All combustible materials

Construction Standard jacket materials; 26-gauge Aluminized Steel or 11-gauge Galvanized Steel. Optional materials available upon request.

Insulation Model HT – Refractory aggregate bonded with calcium aluminate cement. Model HTplus – One inch of HT refractory is replaced with insulating board, ie: heat recovery applications.

Model VHT – Refractory lining of high density aggregate bonded with high purity calcium aluminate cement.

Model AR-2 - Utilizes a high density aggregate cobonded with high purity calcium aluminate cement and potassium silicate binders.

Model AR-H - 60% alumina, high strength, high density, high abrasion resistant, low shrink mix refractory.

Model AR-T – Amorphous, vitreous silica, high density, high abrasion resistant refractory. CUSTOM – Van-Packer is also able to custom apply linings including premixed refractories and membranes as required for your specific needs.

Joint Method Various leak and acid-proof sealants are provided depending on the application. An 8" wide 26-gauge Aluminized Steel draw band which is bolted tightly securing the joint is standard. For heavy-gauge jackets, an 11-gauge Galvanized Steel draw band is available. Joints may also be welded to increase strength.

Diameters Available All models except HTplus 04" through 60"ID. HTplus 10" through 60"ID.

Clearance To Combustibles Model HT 1800°F

ID Inches	Clearance Inches	ID Inches	Clearance Inches
4 - 15	16	45	26
18, 21	18	48	27
24	20	51	28
27	21	54	29
30 - 36	22	57	30
39, 42	25	60	31

Note: Clearance for flue gas temperatures of 1000°F is 6" for all diameters.

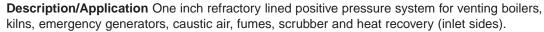
Suggested Clearance To Non-Combustibles Model HT

ID Inches	Clearance Inches						
4 - 18	2						
Above 18	4						
Nets When installed in a new combustible above elements are a processor for installation							

Note: When installed in a non-combustible chase, clearances are as necessary for installation.



Positive Pressure Exhaust Systems



Maximum Temperature Continuous Firing 1400°F

Maximum Temperature Intermittent Firing 1800°F

Fuel LP gas, natural gas, #2, #4, #5, or #6 fuel oils, coal, caustic fumes, and particles

Construction Standard jacket materials; 20-gauge type 304 stainless steel or 20-gauge type 316 stainless steel. Optional materials available upon request.

Insulation One inch refractory

Joint Method The Stainless Steel jacket is flanged and the product comes with joint sealant and vee bands to ensure product integrity is maintained.

Diameters Available 4" through 24" in two-inch increments are standard

Clearance To Combustibles 1400°F Continuous, 1800°F Intermittent

ID Inches	Clearance Inches						
4, 6	2						
8, 10	3						
12 - 18	4						
20 - 24	5						

Clearance To Non-Combustibles Two inches

Application References & Listings c UL us 103, file number MH11435



Engineered Chimneys

Description/Application Our engineers will provide specific designs including sizing, structural, corrosion, and thermal analysis to exhaust products of combustion as specified. These stacks can be factory fabricated using UL Listed refractory lining, or lined with polymers, rubbers, or organics as required for thermal and corrosion conditions involved. Van-Packer's engineers can design unique stacks such as a single stack containing multiple chimney systems. These multiple chimney systems can be constructed of steel or may utilize other Van-Packer products.

Maximum Temperature Continuous Firing As required

Maximum Temperature Intermittent Firing As required

Fuel As specified

Construction As specified

Insulation Typically cast refractory, gunned refractory, fiberglass reinforced polymer, or organic coatings. Other linings are available as required or specified.

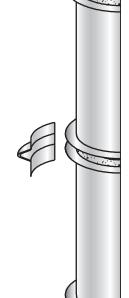
Joint Method As specified

Diameters Available As specified

Clearance To Combustibles As specified

Clearance To Non-Combustibles As specified

Application References & Listings As specified



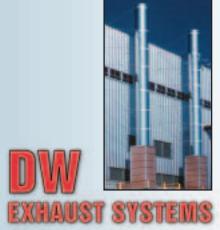
PRODUCT SELECTION GUIDE

The following chart represents the most typical applications for each of our standard products. In addition, we specialize in effective, affordable solutions to unique venting and exhaust applications. APPLICATIONS		Model DW & DWplus - 304	Model DW & DWplus - 316	Model SW	Engineered Chimneys	Model HT	Model HT plus	Model HT w/Membrane	Model VHT	Model AR-2	Model AR-H	Model AR-T	Model ES	Model CS
Boiler-HWH-Furnace, Gas, Negative Pressure, Non-condensing		•	•	•		•	•	•					•	
Boiler-HWH-Furnace, Gas, Negative Pressure Condensing					•			•				•		•
Boiler-HWH-Furnace, Gas, Positive Pressure, Non-condensing		•	•	•	•	•	•	•					•	
Boiler-HWH-Furnace, Gas, Positive Pressure Condensing					•			•				•		•
Boiler-HWH-Furnace, #1 and #2 Oil		•	•		•	•							•	
Boiler-HWH-Furnace, #3 and #6 Oil			•		•	•							•	
Boiler-HWH-Furnace, Coal			•		•	•							•	
Boiler-HWH-Furnace, Wood			•		•	•								
Engine Exhaust, Diesel		•	•		•	•	•						•	
Engine Exhaust, Gas Turbine		•	•		•	•	•						•	
Incinerator, Wood and Paper Products <1400°F					•	•	•						•	
Incinerator, Wood and Paper Products >1400°F					•	•	•					•		
Incinerator, General Hospital Waste					•				•	•		•		
Incinerator, Pathological					•				•	•	•	•		
Incinerator, Special Conditions					•									
Hood, Kitchen Exhaust		•	•		•	•	•							
Hood, Laboratory Exhaust		•	•	•	•								•	
Hood, Fume		•	•	•	•								•	
Scrubber, Inlet Side					•				•				•	
Scrubber, Outlet Side					•									
Heat Recovery, Inlet Side					•				•				•	
Heat Recovery, Outlet Side					•							•		

STANDARD & CUSTOM DESIGN SOLUTIONS FOR EVERY APPLICATION

The design and manufacture of exhausting and venting stacks is a highly specialized field, requiring knowledge and experience with structural design; thermal, chemical and corrosive conditions: and more. At Van-Packer, we fully understand exhausting technology. Based on our experience and the use of the latest in technology, our engineers have developed systems for a highly efficient thermal analysis of the various chimney systems, thus allowing a perfect match of the system to your application.

No other company serving the venting industry has the experience, commitment or products offered by Van-Packer. The Product Selection Guide will give you an overview comparison of each of our products to help begin the process of matching a venting system to your application.

















ES EXHAUST SYSTEMS

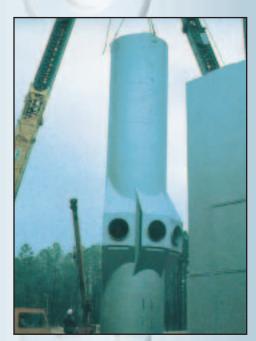




DESIGN, DEVELOPMENT, AND SUPPORT LEADERSHIP!







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 CO., INC.

1-888-VPSTACK (877-8225)
Box 307 • Buda, Illinois 61314
309-895-2311 • Fax 309-895-3891
www.vpstack.com
email: vptech@vpstack.com