



COMPLETE GUIDE FOR PARTS IDENTIFICATION AND SELECTION

METALLIC CHIMNEY LINER SYSTEMS

SINGLE WALL CONSTRUCTION RIGID CHIMNEY LINER

Models IPP • HEP Commercial/Industrial

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LISTINGS			
CHEMINEE LINING venting system models tested in accordance with UL 1777 standar for Existing Masonry or Factory Built Chimn eters. Also, Model HEP is listed under file M II, III, IV appliance.	IPP and HEP are listed by d for chimney liners and th eys and Vents. Listings ind IH10081 and tested in act	Underwriters Laboratories ne Canadian Standard ULC clude the following chimne cordance with UL1738 and	Inc. (UL) under file MH46608 and S-S635, standard for Lining Systems by product categories and diam- I ULC-S636 for venting categories
)	
		/U3 N	
UL 1777 AND ULC-\$635			
CATEGORIES	MODELS	TEMPERATURE	SIZE
1, III II, III, IV	HEP	550°F	6" to 48" 6" to 48"

APPLICATIONS

Chimney Liners Listing (Category I, for oil and gas) – Under this category, model IPP and HEP liners have been determined suitable for field-installation into new or existing masonry chimneys and used to vent gas-fired and oil-fired appliances in which the maximum continuous flue-gas outlet temperature does not exceed 570°F (300°C). They also comply with test at 1700°F (925 °C) temperature for 10 minutes.

Also, model HEP chimney liner system sizes 6" to 48" diameter, can be used in masonry chimneys to vent Category II, III, IV gas- and oil-fired appliances where the vent gas temperature at the appliance outlet does not exceed 550°F (288°C).

In the United States, Models IPP and HEP chimney liners are primarily intended to be installed in new or existing masonry chimneys with or without a liner of fire-clay tile, or to be used as a substitute for masonry fire-clay tile flue liners in new chimneys.

In Canada, Models IPP and HEP chimney liners are primarily intended to be installed in existing masonry chimneys with or without a liner of fire-clay tile, or factory-built chimneys and vents.

	IPP	HEP
UL103	No*	No
UL1738	No	Yes
UL1777	Yes	Yes

* Model IPP was tested with success for positive pressure up to 60 water column under UL-103 section 24

DESIGN

All our single wall chimney systems are part of a large family of IPP (Industrial Positive Pressure) and HEP (High Efficiency Pressure) products for industrial and commercial applications. The components of each model are made using the same continuous laser welding stainless steel inner wall. Since all components have the same male and female ends, the parts of all models fit into one another, thus eliminating the need for all kinds of adapters and providing an incomparable flexibility in selecting models of flues and chimneys.



IPP: Single wall

HEP: Single wall

This unique method for jointing components together is very efficient either in horizontal or in vertical installations. Our simple jointing concept along with the wide variety of components and accessories allows for a quick and simple installation, thus permitting you to save both time and money.

Cheminée Lining is proud of its industrial positive pressure piping systems. Recognized for being high quality products, they are also the easiest to install on the market!

These chimney systems are designed for exhaust of combustion gases, under positive, negative or neutral pressure, emanating from a variety of appliances including but not limited to:

- Boiler negative and positive pressure
- High efficiency boilers
- High efficiency water heaters

Models IPP and HEP provide a wide variety of components and accessories suitable for all kinds of site conditions, thus allowing for quick and simple installation. Each component is packed and shipped complete, with (1) one assembly band and (1) one finishing band for those having female ends. Sufficient tubes of appropriate sealant are also included in the shipment for completing the assembly.

SAMPLE SPECIFICATION (Lining System)

The chimney and flue must meet UL (Underwriters Laboratories Inc.) and c-UL (Underwriters Laboratories of Canada Inc.) standards and carry the appropriate approval labels. The maximum temperature must be 570°F (300°C) for continuous operation.

The chimney and flue components must be of single wall construction and properly designed for positive pressure exhaust. Model IPP wall must be made of 20 gauge 304 or 316 stainless steel, with a continuous laser welding. Model HEP wall must be made of 24 gauge stainless steel as per UL1738, with a continuous laser welding. The joint-ing must be made using the assembly band, the finishing band and the appropriate sealing material, as supplied by the manufacturer.

All components must be installed according to the manufacturer recommendations and must meet the NFPA and local safety code requirements.

MODEL IPP

Wall: 316 L or 304 2B stainless steel (20 ga - 6" (152mm) to 24" (610mm) diameter)

MODEL HEP

Wall: Stainless Steel as per UL1738 (24 ga - 6" (305mm) to 48" (1219mm) diameter)

SUPPORTS & ACCESSORIES

Galvanized steel, hot-galvanized steel, 316 L or 304 2B stainless steel

COMPONIENTS	MATERIALS	
COMPONENTS	STANDARD	AVAILABLE
ASSEMBLY BAND		
COLLARS, FLASHING		1 and 2
DRAIN SECTION		1 and 2
ELBOWS		
EXHAUST CONE		
FAN ADAPTER		
FIRESTOP	3	1 and 2
INCREASER/REDUCER		
LENGTHS, ADJUSTABLE LENGTH		
RAIN CAP, CLOSURE SECTION		
GUY WIRE BAND	1	2, 3 and 4
ROOF SUPPORT, GUIDING SPACER		
TEES		
TEE CAPS		
WALL BAND, SUSPENSION BAND	3	1, 2 and 4
WALL/HORIZONTAL SUPPORTS	3	1, 2 and 4
1: 316 L stainless steel 2: 304 2B stainles	ss steel 3: Galvanized	d steel 4: Hot-galvanized ste

Section C • Technical Data

WEIGHTS AND CLEARANCES

	IPP		H	EP
I.D.	Linear	weight	Linear	weight
in	lb/ft	kg/m	lb/ft	kg/m
6	3.2	4.8	2.2	3.2
8	4.3	6.4	2.9	4.3
10	5.4	8.0	3.6	5.4
12	6.5	9.6	4.3	6.4
14	7.6	11.2	5.1	7.5
16	8.6	12.8	5.8	8.6
18	9.7	14.5	6.5	9.7
20	10.8	16.1	7.2	10.7
22	11.9	17.7	7.9	11.8
24	12.9	19.3	8.7	12.9
26	14.0	20.9	9.4	14.0
28	15.1	22.5	10.1	15.0
30	16.2	24.1	10.8	16.1
32	17.3	25.7	11.5	17.2
34	18.3	27.3	12.3	18.3
36	19.4	28.9	13.0	19.3
38	20.5	30.5	13.7	20.4
40	21.6	32.1	14.4	21.5
42	28.8	42.8	15.2	22.6
44	30.1	44.9	15.9	23.6
46	31.5	46.9	16.6	24.7
48	32.9	48.9	17.3	25.8

Model and	Air space	ir space location		
diameter	Between masonry chimney exterior and combustible	Between masonry chimney interior and liner		
IPP 6" to 48"	0''	1"		
HEP 6" to 48"	0''	1"		



ADJUSTABLE LENGTH • AL

Used to complete on site installation precisely. It is not designed to compensate for linear expansion nor to support the vertical load of the chimney.

Includes: 1 Assembly band (AB)

K = Same as pipe length



90° TEE • T90

For connection of vertical and horizontal lengths. May be used for the installation of a draft regulator at the point of connection between the flue and the appliance. A tee cap (TC) or drain-tee cap (DC) may be used to block one of the cleaning or drainage openings. Always use the T90 for HEP model.

Includes:

1 Assembly band (AB)

K = 1.25



IPP • HEP					
I.	I.D. A B		3		
in	mm	in	mm	in	mm
6	152	13.000	330	6.500	165
8	203	15.000	381	7.500	191
10	254	17.000	432	8.500	216
12	305	19.000	483	9.500	241
14	356	21.000	533	10.500	267
16	406	23.000	584	11.500	292
18	457	25.000	686	12.500	318
20	508	27.000	686	13.500	343
22	559	29.000	737	14.500	368
24	310	31.000	787	15.500	394
26	660	33.000	838	16.500	419
28	711	35.000	889	17.500	445
30	762	37.000	940	18.500	470
32	813	39.000	991	19.500	495
34	864	41.000	1041	20.500	521
36	914	43.000	1092	21.500	546
38	965	45.000	1143	22.500	572
40	1016	47.000	1194	23.500	597
42	1067	49.000	1245	24.500	622
44	1118	51.000	1295	25.500	648
46	1168	53.000	1346	26.500	673
48	1219	55.000	1397	27.500	699

DETACHABLE 90° TEE • DT90

For connection of the horizontal breeching to the vertical lining, it is used only with IPP model to facilitate the installation in a masonry chimney.

Includes:

1 Assembly band (AB)

K=1.25



IPP ● HEP					
I.	I.D. A		E	3	
in	mm	in	mm	in	mm
6	152	13.000	330	6.500	165
8	203	15.000	381	7.500	191
10	254	17.000	432	8.500	216
12	305	19.000	483	9.500	241
14	356	21.000	533	10.500	267
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44	1118	51.000	1295	25.500	648
46	1168	53.000	1346	26.500	673
48	1219	55.000	1397	27.500	699

BASE TEE • BT

Also called clean-out 90° Tee, it is used as a base to support all the liner and to facilitate access for maintenance and inspection. It also has a drain to collect rainwater or water during cleaning. A tee cap (TC) is used to block the horizontal openings for easy access.

Includes:

1 Assembly band (AB)





90° SHORT RADIUS ELBOW • E90

Used to change orientation of flue or chimney by $90^\circ.$ Includes:

1 Assembly band (AB)

K = 0.3



IPP • HEP					
I.	D.		A		
in	mm	in	mm		
6	152	12.328	313		
8	203	13.328	339		
10	254	14.328	364		
12	305	15.328	389		
14	356	16.328	415		
16	406	17.328	440		
18	457	18.328	466		
20	508	19.328	491		
22	559	20.328	516		
24	610	21.328	542		
26	661	22.328	568		
28	712	23.328	594		
30	763	24.328	620		
32	814	25.328	646		
34	865	26.328	672		
36	916	27.328	698		
38	967	28.328	724		
40	1018	29.328	750		
42	1069	30.328	776		
44	1120	31.328	802		
46	1171	32.328	828		
48	1222	33.328	854		



DRAIN-TEE CAP • DC

Used to cover one of the vertical openings of tee. For collection of rainwater or condensation water. Removable, it facilitates access for inspection and maintenance of the chimney. To be connected to a drain of 3/4ø (19mm) - NPT. **Includes:**

1 Assembly band (AB)



INCREASER • I

Used to increase the diameter of the flue or chimney. Specify the diameter of the inlet and outlet of the fitting. **Includes:**

1 Assembly band (I.D. 2) (AB) 1 Finishing band (O.D. 2) (FB)

 $K = 0.5 \left(1 - \left(\frac{I.D.1}{I.D.2} \right)^2 \right)^2$





Difference between	IPP ● HEP Dim. A		
I.D. 2 - I.D. 1	in	mm	
2	15.000	381	
4	19.000	483	
6	23.000	585	
8	27.000	687	
10	31.000	789	

REDUCER • **R**

Used to reduce the diameter of the flue. Specify the diameter of the inlet and outlet of the fitting. **Includes:**



WALL SUPPORT • WS

Used to support the chimney in vertical runs. It keeps the chimney at an adjustable distance between 4" (102mm) and 10" (254mm) from the wall. The oblique braces may be attached to the wall either above or below the supporting surface.



IPP ● HEP					
I.	I.D. A				
in	mm	in	mm		
6	152	10.000	254		
8	203	12.000	305		
10	254	14.000	356		
12	305	16.000	406		
14	356	18.000	457		
16	406	20.000	508		
18	457	22.000	559		
20	508	24.000	610		
22	559	26.000	660		
24	610	28.000	711		
26	661	30.000	762		
28	712	32.000	813		
30	763	30.000	762		
32	814	32.000	813		
34	865	34.000	864		
36	916	36.000	914		
38	967	38.000	965		
40	1018	40.000	1016		
42	1069	42.000	1067		
44	1120	44.000	1118		
46	1171	46.000	1168		
48	1222	48.000	1219		

ROOF SUPPORT • RS

Used to support and guide the portion of the chimney which extends to the roof. It is attached to the roof curb by means of four (4) angles. It keeps a minimum distance between the chimney and combustible materials at the roof.



IPP ● HEP				
I.D.		4	4	
in	mm	in	mm	
6" to 14"	152 to 356	5.250	133	
16" to 22"	406 to 559	7.250	184	
24" to 32"	610 to 814	9.250	235	
34" to 42"	864 to 1067	11.250	286	
44" to 48"	1118 to 1219	13.250	337	

GUIDING SPACER • GS

Used to guide the flue or the chimney against the inner wall of the sleeves it passes through. It holds the chimney at a distance of 2" (51mm) from the wall firestop (WFS), insulated wall firestop (IFS) or an insulated sleeve (IS).



IPP • HEP				
I.		4		
in	mm	in	mm	
6" to 16"	152 to 406	4.000	102	
18" to 36"	457 to 914	6.000	152	
38" to 48"	965 to 1219	8.000	203	

FIRESTOP • FS

Used to keep space between any combustible material of a wall, where a flue or chimmey penetrates.



WALL BAND • WB

Used to stabilize the chimney along a vertical wall. The maximum recommended spacing between wall bands is 10'-0" (3048mm).

Includes:

1 Wall bracket

1 Stabilizing angle



GUY WIRE BAND • GWB

Used to stabilize a chimney laterally where it extends more than 10'-0" (3048mm) above the roof or for locations exposed to strong winds. It is attached to the chimney and is designed to receive 3 guy wires 120° apart (not included). It may be manufactured to receive 4 guy wires 90° apart.



LOWERING BAND • LB

Also called Lifting Band, it is used to lower the lining in the masonry chimney.



ROOF BAND • **RB**

Used to stabilize a chimney laterally where it extends more than 10'-0" (3048mm) above the roof or for locations exposed to strong winds. It is attached to the chimney and the roof curb and does not require anchoring to the roof.



STORM COLLAR • SC

Used to seal the space between the chimney and flashing. The storm collar must be sealed to the chimney with appropriate sealant. It is supplied with flashing for flat roofs of adjustable flashing.

Includes:

1 Socket head cap screw



VENTILATED COLLAR • VC

Used to seal the space between the chimney and flashing. The ventilated collar must be sealed to the chimney with appropriate sealant. It is supplied with ventilated flashing. Includes:

1 Socket head cap screw



FAN ADAPTER • FA

Installed at the chimney termination. Used to connect the chimney to an induced draft fan.



RAIN CAP • RC

Installed at the top of the chimney. It prevents entry of rain.

K = 0.5



I.D. in mm 6 152	A in	mm
in mm 6 152	in	mm
6 152	10 500	
	12.500	318
8 203	13.500	343
10 254	15.500	394
12 305	17.500	445
14 356	19.500	495
16 406	21.500	546
18 457	23.500	597
20 508	25.500	648
22 559	27.500	699
24 610	29.500	749
1		

EXHAUST CONE • EC

Installed at the top of the chimney. It improves the draft and increases the speed of exhaust gases by 50%. Installation of a drain-tee cap (DC) or a drain section (DS) at the base of the chimney is required for use of an exhaust cone.

K = 1.25



IPP ● HEP					
l.	I.D. A B				3
in	mm	in	mm	in	mm
6	152	5.000	127	17.500	438
8	203	7.000	178	17.500	438
10	254	8.000	203	17.500	438
12	305	10.000	254	17.500	438
14	356	12.000	305	23.500	591
16	406	14.000	356	23.500	591
18	457	16.000	406	23.500	591
20	508	16.000	406	23.500	591
22	559	18.000	457	23.500	591
24	610	20.000	508	23.500	591
26	660	22.000	559	29.500	749
28	711	24.000	610	29.500	749
30	762	24.000	610	29.500	749
32	813	26.000	660	31.500	800
34	864	28.000	711	33.500	851
36	914	30.000	762	35.500	851
38	965	30.000	762	35.500	851
40	1016	32.000	813	37.500	953
42	1067	34.000	864	39.500	1003
44	1118	36.000	914	41.500	1054
46	1168	38.000	965	43.500	1105
48	1219	40.000	1016	45.500	1156

RAINSHIELD • **RSH**

Installed at the top of the chimney. It prevents rain penetration when the chimney is installed at a location subject to high wind conditions. Installation of a drain-tee cap (DC) or drain section (DS) at the base of the chimney is required for use of a rainshield. Available from 6" (152mm) to 16" (406mm) diameter.



CLOSURE SECTION • CS

Installed at the end of the chimney in horizontal exhaust applications. To be used with engine exhaust. Diameter range from 6" (152mm) to 16" (406mm). Material thickness is the same as the chimney section it is used with. K = 1.25



VENTILATED FLASHING • VF

Used to seal and ventilate the space between the chimney and the roof. It reduces the temperature around the roof opening and it prevents excessive accumulation of heat near combustible materials.

Includes:

1 Ventilated collar (VC)



IPP ● HEP				
I.D. A				
in	mm	in	mm	
6	152	10.000	254	
8	203	12.000	305	
10	254	14.000	356	
12	305	16.000	406	
14	356	18.000	457	
16	406	20.000	508	
18	457	22.000	559	
20	508	24.000	610	
22	559	26.000	660	
24	610	28.000	711	
26	660	30.000	762	
28	711	32.000	813	
30	762	34.000	864	
32	813	36.000	914	
34	864	38.000	965	
36	914	40.000	1016	
38	965	42.000	1067	
40	1016	44.000	1118	
42	1067	46.000	1168	
44	1118	48.000	1219	
46	1168	50.000	1270	
48	1219	52.000	1321	

Guide to Component Parts

MATERIALS	CODE	PAGE
ADJUSTMENT / EXPANSION		
Adjustable Length	AL	7
Increaser	I	11
Reducer	R	11
Variable Length	VL	11
COMPONENT		
Drain-Tee Cap	DC	10
Tee Cap	TC	10
CONNECTION / OFFSET		
90° Short Radius Elbow	E90	18
90° Tee	T90	13
Base Tee	BT	9
Detachable 90° Tee	DT90	8
FIRE PROTECTION		
Firestop	FS	13
JOINTING		
Assembly Band	AB	10

MATERIALS	CODE	PAGE
LENGTH		
12" Length	12L	7
24" Length	24L	7
36" Length	36L	7
48" Length	48L	7
SEALING AT ROOF		
Flashing for Flat Roof	F	16
Ventilated Flashing	VF	16
SIDE STABILITY		
Guy Wire Band	GWB	13
Roof Band	RB	14
Wall Band	WB	13
Lowering Band	LB	13
SUPPORT / GUIDE		
Guiding Spacer	GS	12
Roof Support	RS	12
Wall Support	WS	12
TERMINATIONS		
Closure Section	CS	15
Exhaust Cone	EC	15
Fan Adapter	FA	14
Rain Cap	RC	15
Rain Shield	RHS	15

PIPE AND FITTING JOINT ASSEMBLY, STEP BY STEP



- 1. All components have a male and a female end. The orientation is indicated on the labelling of each section with an arrow. The arrow indicates the direction of the flue.
- 2. Before fitting the ends into one another, a sealant (LTS or HTS) is applied on the male end, at the gap between the inner flange and the inner pipe.
- 3. Assemble both sections by sliding one section into the other until the flanges meet. A layer of sealant is applied inside the V-Groove of the Assembly band (AB) prior to its installation over the joint.
- 4. The Assembly band (AB) is installed and clamped in place with 4 nuts and bolts (supplied).
- 5. FOR OUTDOOR INSTALLATION AND BAD WEATHER PROTECTION, AN EXTERIOR SEALANT (ES) IS APPLIED AT THE JOINT BETWEEN THE ACCESSORY AND THE EXTERIOR OF THE CHIMNEY.



Up to 2000°F flue gas temperature ES: Exterior Sealant.

Outer sealant weather proof

Sample Drawings



1-YEAR STANDARD WARRANTY

Models IPP, HEP

All components of our models IPP and HEP chimney system have been inspected in our workshop in accordance with our quality standards. Cheminée Lining Inc. warrants the chimney/exhaust system and components against defects in material and workmanship for a period of (1) one year from date of delivery to the purchaser. During this period, any system or component supplied by Cheminée Lining Inc. failing to perform its intended function of exhausting, without adverse leakage, combustion by-products from engine or heating appliance will be repaired or replaced at the manufacturer option.

This warranty is limited to repair or replacement of any component which has been proven de fective by a factory-authorized inspector by Cheminée Lining Inc. This warranty does not cover any labour cost or freight charge for removal or replacement of the defective product, nor does this warranty cover any system component not furnished by Cheminée Lining Inc. and installed as part of the system. The warranty on any repaired or replacement component shall be for a duration no longer than the remaining or unexpired term of the original warranty.

This standard warranty is subject to the following conditions:

- a) Generally accepted engineering practices have been followed to determine that sizing and material specifications are suitable for the application and environment involved.
- b) The undamaged components have been correctly installed in accordance with the installation instructions published by Cheminée Lining Inc. at the time of shipment.

The standard warranty is extended to a **15-YEAR LIMITED WARRANTY** provided the following conditions are satisfied:

- a) The chimney must have been connected to an appliance listed by a testing authority recognized by the federal government. Also, this warranty is void if the appliance was not installed, used and maintained according to the manufacturer instructions.
- b) The chimney system must have been designed and sized by the engineering department of Cheminée Lining Inc. All design and operating parameters provided to Cheminée Lining Inc. must meet the standards of Cheminée Lining Inc. and must be accurately representative of the operating conditions.
- c) The undamaged components must have been correctly installed, used and maintained in accordance with the instructions published by Cheminée Lining Inc. at the time of shipment.
- d) Air used in combustion must be free from any solvent or refrigerant vapor and from any halogenated compound which might generate acid condensate within the flue or chimney.
- e) Cheminée Lining Inc. has supplied the entire chimney or exhaust system from the appliance outlet to the stack termination.
- f) Prior to start-up and thereafter, exposed galvanized and aluminized steel surfaces are at all times protected with a minimum of one base coat primer and one finish coat of heat and corrosion resistant paint.

In no event shall Cheminée Lining Inc. be liable for any incidental or consequential damages of any kind or for any damage resulting in whole or in part from misuse, improper installation, removal and/or reuse of components or inadequate maintenance of the system or any component part thereof. In no event shall Cheminée Lining Inc. be liable for any cost of installation, removal and reinstallation. Cheminée Lining Inc. assumes no liability in case of fire, chimney fire, lightning or act of God. This warranty is in lieu of all other express warranties or guarantees of any kind. All implied warranties, including merchantability and fitness, are limited to the duration of the express warranty contained herein. Cleaver-Brooks. neither assumes nor authorizes any other person to assume on its behalf any other liability in connection with products sold. No agent is authorized to make any modification to this warranty or additional warranties, even if in writing, binding Cheminée Lining Inc.

The purchaser or complainant must send all claims under this warranty in writing to Cheminée Lining Inc. Customer Service Department.





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