

# SYSTEM 636 FLUE GAS VENTING

PVC 1-1/2" - 6" (40mm - 150mm)  
CPVC 1-1/2" - 8" (40mm - 200mm)

## System 636®

System 636® offers the most comprehensive flue gas venting system on the market. Renowned for its commitment to safety, System 636 is a trusted choice for venting gas-fired condensing appliances.

The CSA B149.1 Natural Gas and Propane Installation Code mandates that all special venting materials on gas-fired water heaters, furnaces, and boilers be certified to ULC S636 across Canada. System 636 meets these stringent standards with a complete range of certified pipes, fittings, accessories, and cements, delivering the quality, performance, and support you expect from IPEX.

System 636 also supports common venting, allowing multiple appliances to share a single exhaust vent and air intake, reducing terminations to two and simplifying installation. This approach minimizes spacing constraints and material costs.

The System 636 Installation Guide is crucial for installers and inspectors. It is part of the certification process and includes essential information for successful, code-compliant installations. The guide covers support spacing, expansion and contraction, solvent welding procedures, and special installation and terminations.



### APPLICATIONS

- Flue Gas Venting
- Residential
- Hospitality
- Car washing stations
- Commercial
- Institutional
- Restaurants

### STANDARDS

PVC/CPVC ULC S636  
CPVC – CAN/ULC S102.2  
CSA B149.1



### DID YOU KNOW?

IPEX recommends that installers take the System 636 training every three (3) years to maintain proper installation methods.

### ADVANTAGES

- 1 Fully certified systems of pipe, fittings, accessories, and cements to ULC S636 for use up to 65°C (149°F) for PVC and 90°C (194°F) for CPVC
- 2 No mixing clause of ULC S636 ensures full compatibility of all pipe, fittings and cement
- 3 Common Venting solution meets the requirements of the CSA B149.1 and provides installation flexibility when venting multiple gas fired condensing appliances
- 4 Engineered Vent Termination Solutions
- 5 Coloured cement allows for easy joint inspection
- 6 Installation training, technical and sales team support



## TWO CERTIFIED SOLUTIONS

### SYSTEM 636 PVC

System 636 PVC is classified as Type BH Class II A vent, suitable for use on appliances with flue gas temperatures up to and including 65°C (149°F). Sizes include 40, 50, 65, 75, 100, 150, 200, 250 & 300mm (1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10" & 12"). Coloured white with unique blue certification markings, System 636 PVC pipe is made to sturdy Sch. 40 dimensions to provide a strong, rigid pipe for the application. A full range of certified vent fittings and accessories offered.

### SYSTEM 636 CPVC

System 636 CPVC is classified as Type BH Class II B vent, suitable for use on appliances with flue gas temperatures up to and including 90°C (194°F). CPVC sizes include 40, 50, 65, 75, 100, 150, 200, 250 & 300mm (1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10" & 12"). Coloured grey, System 636 CPVC pipe is also made to sturdy Sch. 40 dimensions to be tough enough for the application's demands.



### SYSTEM 636 CEMENTS & PRIMERS

System 636 PVC & CPVC solvent cements are specifically formulated and certified for flue gas venting applications. Primer is always required for 6" and 8" (150 mm and 200 mm) piping systems and for all installations performed at temperatures of 0°C (32°F) or less.



**System 636®**  
FLUE GAS VENTING

# SYSTEM 636<sup>®</sup> SPECIALTY FITTINGS



## UNIVERSAL CONCENTRIC VENT KITS (UCVK™)

- PVC & CPVC available in 3" diameter.
- Horizontal coaxial termination for venting tankless water heaters installed on exterior wall.
- Engineered air intake hub pivots to accommodate spacing requirements between fresh air and exhaust collars for most brands of tankless water heaters.



## CONCENTRIC VENT KITS

- PVC & CPVC available in various lengths with 2", 3" and 4" diameters.
- "Pipe-in-pipe" kits allow exhaust and intake pipes to penetrate the roof or side wall through one opening.
- Certified with rain caps when installed with the included stainless-steel screw/nut. Rain cap can be easily removed for maintenance.
- Field modification provides compliance with BOTH the appliance manufacturers and IPEX's guidelines.



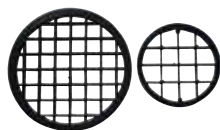
## WALL TERMINATION KITS

- Available in 2", 2-1/2" and 3" diameters.
- PVC kits require two small wall penetrations for intake and exhaust.
- Kits include a white finishing plate with self-sealing foam back that can be screwed to the exterior wall.



## LOW PROFILE TERMINATION KITS (PVC)

- Available in a 2", 3" and 4" diameter, kits offer a lower profile alternative to the typical two pipe side wall termination kit.
- Integrally molded vent screens included, and both intake and exhaust are disguised.
- Each kit is molded with a ULC S636 certified beige PVC compound.



## VENT SCREENS

- Available in 2", 3", 4", 6" and 8" (plastic or stainless steel).
- Prevents debris and rodents from entering the venting system.
- Non-certified vent screens can be friction fit into any IPEX termination kit.



## ACCESS TEE

- PVC & CPVC available in 1-1/2", 2", 3" and 4" diameters.
- Allows an inline point for flue monitoring using System 636 components.
- Removable 1/2" MPT plug.
- May be installed in new installations or added to existing lines when monitoring is required.
- Certified for use only on IPEX System 636 flue gas vent lines.



## ENGINEERED BACKFLOW VALVE

- PVC & CPVC available in 4" diameter.
- Certified to the ULC S636 standard.
- Integrated two stage dampers accommodate varying fan speeds.
- In-line condensate drain requires no priming.
- Integrated cleanout for inspection purposes.




## CLEANOUT CONDENSATE DRAIN

- PVC & CPVC available in 6", 8", 10" and 12" diameters.
- Integrated in-line ball check style drain requires no priming of the drain to operate.
- Integrated cleanout provides access to remove any debris from the exhaust vent.

## PRODUCT SELECTION CHART - SYSTEM 636


Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

Gas Vent Pipe Plain end (10 ft lengths)



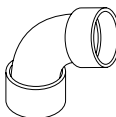

PVC	1-1/2	40	194003
	2	50	194000
	2-1/2	65	194004
	3	75	194001
	4	100	194002
	6	150	194011
	8	200	194012
	10	*	255
12	*	305	194014

---



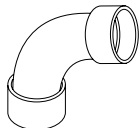

CPVC	2	50	198001	
	2-1/2	65	198004	
	3	75	198000	
	4	100	198002	
	6	150	198005	
	8	200	198006	
	10	*	255	198026
	12	*	305	198027

FGV 90° Elbow H x H

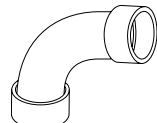
	PVC	2	50	196035	
		2-1/2	65	196525	
		3	75	196025	
		6	150	196140	
		8	200	196141	
		10	*	255	196168
		12	*	305	196156
	CPVC	2	50	197199	
		3	75	197201	
		4	100	197202	
		6	150	197203	
		8	200	197204	
		10	*	255	197089
		12	*	305	197088

Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

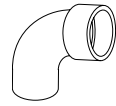

FGV 90° Long Elbow H x H

	PVC	1-1/2	40	196121
		2	50	196122
		2-1/2	65	196120
		3	75	196123
		4	100	196124
	CPVC	2	50	197122
		3	75	197123
		4	100	197124
		6	150	197125
		8	200	197126


FGV 90° Extra long Elbow H x H

	PVC	2	50	196022
		3	75	196023

FGV 90° Street Elbow Sp x H

	PVC	2	50	196232
		3	75	196233
		4	100	196070
	CPVC	4	100	197234

FGV 22-1/2° Elbow H x H

	PVC	2	50	196252
---	-----	---	----	--------

\* 10" and 12" sizes are made to order.

PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.

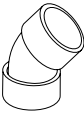
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.

Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.

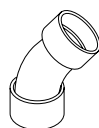
## PRODUCT SELECTION CHART - SYSTEM 636

Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------


FGV 45° Elbow H x H

	PVC	1-1/2	40	196241	
		2	50	196242	
		2-1/2	65	196487	
		3	75	196243	
		4	100	196244	
		6	150	196131	
		8	200	196132	
		10	*	255	196169
		12	*	305	196157
	CPVC	2	50	197169	
		3	75	197171	
		4	100	197172	
		6	150	197173	
		8	200	197174	
		10	*	255	197116
		12	*	305	197090

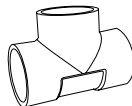
FGV 45° Long Elbow H x H

	PVC	2	50	196010
		3	75	196011

FGV 45° Long Elbow H x Sp

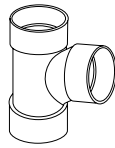
	PVC	2	50	196071
		3	75	196223
		4	100	196117
	CPVC	4	100	197118

FGV Tee H x H x H

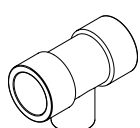
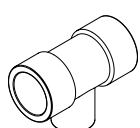
	CPVC	2	50	197486
		3	75	197488
		4	100	197489
		6	150	197490
		8	200	197491

Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

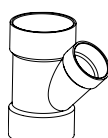
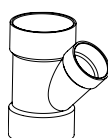
FGV Tee-Wye H x H x H

	PVC	1-1/2	40	196081
		2	50	196082
		2-1/2	65	196781
		3	75	196083
		4	100	196084
		6	150	196785

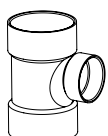
FGV Reducer Tee H x H x H

	PVC	2 x 1-1/2	50 x 40	196056
		3 x 1-1/2	75 x 40	196061
		3 x 2	75 x 50	196822
		4 x 2	100 x 50	196828
	CPVC	3 x 2	75 x 50	197502
		4 x 2	100 x 50	197504
		6 x 6 x 4	150x150x 100	197506
		8 x 8 x 6	200x200x150	197567

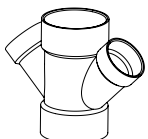
FGV Reducing Wye

	PVC	6 x 4	150 x 100	196114
		8 x 4	200 x 100	196126
		10 x 4	* 255 x 100	196170
		12 x 4	* 305 x 100	196158
	CPVC	6 x 4	150 x 100	197114
		8 x 4	200 x 100	197061
		10 x 4	* 255 x 100	197091
		12 x 4	* 305 x 100	197082

FGV Reducing Tee-Wye

	PVC	3 x 2	75 x 50	196185
		4 x 2	100 x 50	196184
		6 x 4	150 x 100	196173
	CPVC	6 x 4	150 x 100	197079

FGV Reducing Double Wye

	PVC	6 x 6 x 4 x 4	150x150x 100x100	196171
	CPVC	6 x 6 x 4 x 4	150x150x 100x100	197078

\* 10" and 12" sizes are made to order.

PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.

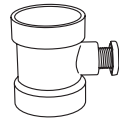
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.

Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.

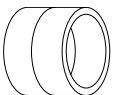
## PRODUCT SELECTION CHART - SYSTEM 636

Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------


FGV Access Tee H x H x FPT

	PVC	1-1/2	40	196510
		2	50	196511
		3	75	196512
		4	100	196513
	CPVC	2	50	197511
		3	75	197512
		4	100	197513

FGV COUPLING H x H

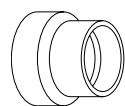
	PVC	1-1/2	40	196452	
		2	50	196352	
		2-1/2	65	196454	
		3	75	196353	
		4	100	196354	
		6	150	196142	
		8	200	196144	
		10	*	255	196151
		12	*	305	196150
		CPVC	2	50	197026
3	75		197027		
4	100		197023		
6	150		197141		
8	200		197142		
10	*		255	197084	
12	*		305	197083	

FGV Deep Socket Coupling H x H

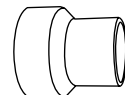
	PVC	2	50	196453
		3	75	196455
	CPVC	2	50	197137
		2-1/2	65	197138
		3	75	197139
		4	100	197140

Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

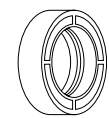
FGV Increaser Coupling H x H

	PVC	2 x 1-1/2	50 x 40	196452
		3 x 2	75 x 50	196352
		4 x 2	100 x 50	196454
		4 x 3	100 x 75	196353
	CPVC	6 x 4	150 x 100	196354
		3 x 2	75 x 50	197470
		4 x 2	100 x 50	197365
		4 x 3	100 x 75	197472
		6 x 4	150 x 100	197145

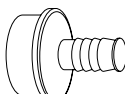
FGV Appliance Adapter H x Sp

	PVC	2-1/2 x 2	65 x 50	196302
---	-----	-----------	---------	--------

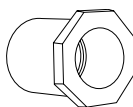
FGV Reducer Bushing Sp x H

	PVC	1-1/2 x 1/2	40 x 15	196653
		2 x 1-1/2	50 x 40	196282
		2-1/2 x 1-1/2	65 x 40	196666
		2-1/2 x 2	65 x 50	196667
		3 x 2	75 x 50	196284
		3 x 2-1/2	75 x 65	196673
		4 x 2	100 x 50	196235
		4 x 3	100 x 75	196236
	CPVC	4 x 2	100 x 50	197129
		4 x 3	100 x 75	197130

FGV Reducer bushing Sp x Hose Barb

	PVC	1-1/2 x 1/2	40 x 15	196278
	CPVC	1-1/2 x 1/2	40 x 15	197278

FGV Hex Head Reducer Bushing Sp x H

	PVC	3 x 2	75 x 50	196672
		2 x 1/2	50 x 15	197385
		2 x 3/4	50 x 20	197386
		2 x 1-1/2	50 x 40	197389
	CPVC	3 x 2	75 x 50	197394
		3 x 2-1/2	75 x 65	197395
		4 x 2	100 x 50	197396
		6 x 4	150 x 100	197400
		8 x 6	200 x 150	197401

\* 10" and 12" sizes are made to order.

PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.

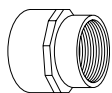
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.

Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.

## PRODUCT SELECTION CHART - SYSTEM 636

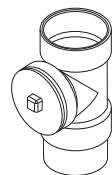
Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

### FGV Female Thread Adapter H x FPT



PVC	2	50	196564
CPVC	2	50	197224

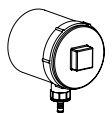
### FGV Backflow Valve with Cleanout



PVC	4**	100	196211
CPVC	4**	100	197112

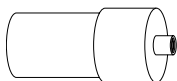
\*\* 4" Backflow Valve with Cleanout is made to order

### FGV Cleanout with Condensate Drain



PVC	6	150	196220
	8	200	196221
	10 *	255	196222
	12 *	305	196224
CPVC	6	150	197119
	8	200	197120
	10 *	255	197121
	12 *	305	197127

### FGV Condensate Drain Assembly Sp x FPT



CPVC	4 x 1/2	100 x 15	197002
	6 x 1/2	150 x 15	197003

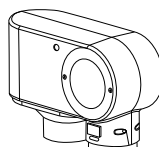
Material	Dimension inches	mm	Product Code
----------	---------------------	----	-----------------

### FGV End Cap H



PVC	6	150	196214
	8	200	196215
	10 *	255	196217
	12 *	305	196159
CPVC	6	150	197059
	8	200	197060
	10 *	255	197093
	12 *	305	197092

### FGV Universal Concentric Vent Kit (UCVK™)



PVC	3 x 24	75 x 600	196256
CPVC	3 x 24	75 x 600	197256

### FGV Concentric Vent Kit



PVC	2 x 16	50 x 400	196005
	2 x 28	50 x 700	196105
	2 x 40	50 x 1000	196125
	3 x 20	75 x 500	196006
	3 x 32	75 x 800	196106
	3 x 44	75 x 1100	196116
	4 x 36	100 x 900	196021
	2 x 16	50 x 400	197040
CPVC	2 x 28	50 x 700	197033
	3 x 20	75 x 500	197009
	3 x 32	75 x 800	197107
	3 x 44	75 x 1100	197117
	4 x 36	100 x 900	197021

Vent Screen not included

\* 10" and 12" sizes are made to order.

PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.

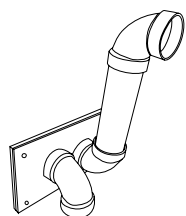
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.

Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.

## PRODUCT SELECTION CHART - SYSTEM 636

Material	Dimension		Product Code
	inches	mm	

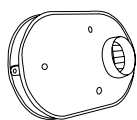
### FGV PVC Wall Termination Kit



PVC	2	50	081216
	2-1/2	65	081218
	3	75	081219

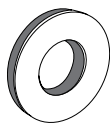
Vent Screen not included

### FGV PVC Low Profile Termination Kit (Beige)



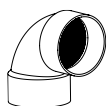
PVC	2	50	196984
	3	75	196985
	4	100	196986

### Faceplate - Round (w/ self sealing foam back)



PVC grey matches CPVC	2	50	196063
	3	75	196064
	4	100	196055
	2 grey	50	197053
	3 grey	75	197054
	4 grey	100	197055

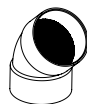
### FGV 90° Termination H



PVC	6	150	196161
	8	200	196160
	10	*	196153
	12	*	196152
CPVC	6	150	197075
	8	200	197074
	10	*	197115
	12	*	197085

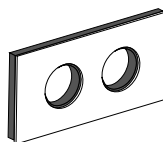
Material	Dimension		Product Code
	inches	mm	

### FGV 45° Termination H



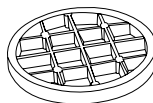
PVC	6	150	196163
	8	200	196162
	10	*	196155
	12	*	196154
CPVC	6	150	197077
	8	200	197076
	10	*	197087
	12	*	197086

### Faceplate - Rectangular (white w/ self sealing foam back)



2	50	196216
2-1/2	65	196218
3	75	196219

### Termination Vent Screens



* 2	50	196050
* 3	75	196051
* 4	100	196052
† 6	150	196090
† 8	200	196091

Vent screens are not ULC S636 Certified.

Friction fit vent screens inside termination fitting bells to prevent debris & rodents from entering vent.

\* Polyethylene † Stainless Steel

\* 10" and 12" sizes are made to order.

PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.

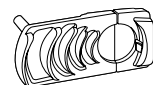
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.

Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.

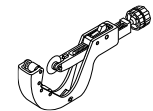
PRODUCT SELECTION CHART - SYSTEM 636

	Dimension		Product Code
	inches	mm	

Deburring Tool


	1-1/2" to 4" pipe	40 to 100mm pipe	196246
To ensure quality solvent cement connections, deburr all pipe ends prior to cementing.			

Cutter


	1-1/2" to 3"	40 to 75mm	196247
---	--------------	------------	--------

	Volume		Product Code
	imperial	ml	

PVC Cement (LOW VOC)

	Medium Body ≤ 6"	1/4 pint	118	296366
		1 pint	473	196040
		1 quart	946	196041


PVC / CPVC Cement (LOW VOC)



1 pint	473	196046
1 quart	946	196047

Certified for use with PVC, CPVC and transitions to PVC. 2" to 12"


PVC / CPVC Primer (LOW VOC)

	Purple	1/4 pint	118	296367
	Purple	1 pint	473	196042
	Clear	1 pint	473	196017
	Purple	1 quart	946	196043

- Primer shall be used when installing System 636 PVC or CPVC products at temperatures below 0°C (32°F).
- Primer is always required on 6", 8", 10" and 12".
- Primer is required in some jurisdictions regardless of temperature, verify with your local Authority Having Jurisdiction.

Note: Use only System 636 cements and primers. Substituting other cements and primers will void certification and warranty.  
All pint and quart cans supplied with dauber (applicator) for use up to 4".

Swab

	quart	946	074426
	For pipe diameters 3" - 6"		
	gallon	3785	074456
	For pipe diameters 6" and larger. Fits 074425 can.		

\* 10" and 12" sizes are made to order.  
PVC Note: For use with gas fired appliances producing flue gases 65°C (149°F) or less.  
CPVC Note: For use with gas fired appliances producing flue gases 90°C (194°F) or less.  
Different manufacturers have different joint systems and adhesives. DO NOT mix pipe, fittings or joining methods from different manufacturers.