

# SYSTEM 636 FLUE GAS VENTING

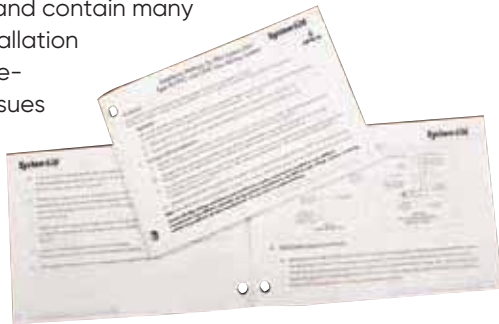
PVC 1-1/2" - 6" (40mm - 150mm)  
CPVC 1-1/2" - 8" (40mm - 200mm)

## System 636®

The use of plastic venting systems on gas fired water heaters, furnaces and boilers has undergone a significant change. CSA B149.1 Natural Gas and Propane Installation Code now requires all special venting material to be certified to ULC S636 across Canada. IPEX addressed this market need with System 636, a fully certified flue gas vent system.

Since the inception of System 636, IPEX has made numerous product line additions and extensions to now offer the most complete product offering in the market. Also, System 636 is very professionally represented by IPEX with sales, technical, code issues and training support.

Front and centre to aid installers and inspectors is the System 636 Installation Guide. The contents of this guide are part of the certification process and contain many important aspects of installation to ensure successful, code-compliant installations. Issues addressed in the Guide include support spacing, expansion and contraction, solvent welding procedures and special installation and terminations.



### APPLICATIONS

- Flue Gas Venting
- Residential or Commercial

### STANDARDS



CSA B149.1



ULC S636



Intertek  
ULC S636

### **i** DID YOU KNOW?

To help fully understand the procedures for cementing PVC and CPVC System 636 versus traditional ABS material, IPEX offers an on-line System 636 solvent welding refresher course.

### ADVANTAGES

- 1 Fully certified as a complete pipe, fittings and cement system.
- 2 2 system options cover a broad range of operating temperatures.
- 3 Manufactured and supported by the Canadian PVC & CPVC piping system experts.
- 4 No mixing clause of ULC S636 ensures full compatibility of all pipe, fittings and cement.



## 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 and 100mm (1-1/2", 2", 2- 1/2", 3", 4" and 6"). 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 and 200mm (1-1/2", 2", 2- 1/2", 3", 4", 6" and 8"). 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<sup>®</sup>**  
FLUE GAS VENTING

## THREE CERTIFIED WAYS TO TERMINATE YOUR SYSTEM 636® FLUE GAS VENTING SYSTEM



### UNIVERSAL CONCENTRIC VENT KITS (UCVK™)

The System 636 UCVK™ offers horizontal coaxial termination specifically for venting tank-less water heaters installed on an exterior wall. An engineered air intake hub, pivots to accommodate the spacing requirements between the fresh air, and exhaust collars for the majority of tankless water heaters offered on the market today. Designed utilizing the fundamentals of the Concentric Vent kits, the 2" and 3" UCVK is made to optimize productivity through ease of installation.

### CONCENTRIC KITS (PVC & CPVC)

System 636 Concentric Kits, are available in a variety of lengths and come in 2", 3" and 4" diameters. These "pipe-in-pipe" kits allow for both exhaust and intake pipes to penetrate the roof or side wall through only one hole. The concentric vent kits are now certified with mechanically fastened rain caps. When installed with the included stainless steel screw/nut the rain cap can be easily removed for cleaning or replacement.



### SIDE WALL KITS (PVC)

For a traditional vent style, IPEX's PVC Side Wall Vent Kits are available in convenient 2", 2-1/2" and 3" sizes. These PVC kits require only two small wall penetrations for intake and exhaust. Kits include a white finishing plate with a self sealing foam back that can be screwed to the exterior wall.

### LOW PROFILE TERMINATION KITS (PVC)

The kits offer a lower profile alternative to the typical two pipe side wall termination kit. They include integrally molded vent screens, and the design neatly disguises both the intake and exhaust. Each kit is molded with a ULC S636 certified beige PVC compound.



### VENT SCREENS

IPEX also offers 2", 3", 4", 6" and 8" vent screens to prevent debris and rodents from entering and plugging the venting system. These non-certified vent screens can be friction fit in any IPEX termination kit.

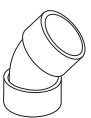
### ROUND FACE PLATES


These round face plates are the perfect accessory for single wall penetrations like the Concentric Vent Kits, or in instances where two pipes are too far apart to use a two hole termination kit. The face plates help cover unsightly bore holes created during the pipe installation. They are available in both white and grey to match the certified vent pipe, and each plate includes a self sealing foam back.


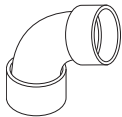
# PRODUCT SELECTION CHART - SYSTEM 636

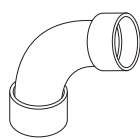
Material	Dimension		Product Code
	inches	mm	
<b>Gas Vent Pipe Plain End (10ft lengths)</b>			
 PVC	1-1/2	40	194003
	2	50	194000
	2-1/2	65	194004
	3	75	194001
	4	100	194002
 CPVC	6	150	194011
	1-1/2	40	198003
	2	50	198001
	2-1/2	65	198004
	3	75	198000
CPVC LG DIA.	4	100	198002
	6	150	198005
	8	200	198006

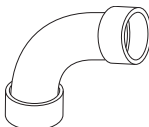
<b>FGV 22-1/2° Elbow H x H</b>				
	PVC	2	50	196252

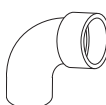
<b>FGV 45° Elbow H x H</b>				
	PVC	1-1/2	40	196241
		2	50	196242
		2-1/2	65	196487
		3	75	196243
		4	100	196244
CPVC	2	50	197169	
	3	75	197171	
	4	100	197172	
CPVC LG DIA.	6	150	197173	
	8	200	197174	

<b>FGV 45° Long Elbow H x H</b>				
	PVC	2	50	196010
		3	75	196011

Material	Dimension		Product Code	
	inches	mm		
<b>FGV 45° Elbow H x Sp</b>				
	PVC	2	50	196071
		3	75	196223
<b>FGV 90° Elbow H x H</b>				
	PVC	2	50	196035
		2-1/2	65	196525
		3	75	196025
		6	150	196140
	CPVC	2	50	197199
CPVC	3	75	197201	
	4	100	197202	
CPVC LG DIA.	6	150	197203	
	8	200	197204	

<b>FGV 90° Long Elbow H x H</b>				
	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	
	CPVC LG DIA.	6	150	197125
8	200	197126		

<b>FGV 90° Extra Long Elbow H x H</b>				
	PVC	2	50	196022
		3	75	196023

<b>FGV 90° Street Elbow Sp x H</b>				
	PVC	2	50	196232
		3	75	196233

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.

# PRODUCT SELECTION CHART - SYSTEM 636

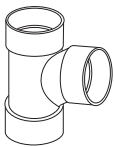
Material	Dimension		Product Code
	inches	mm	

## FGV Tee H x H x H



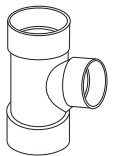
PVC	2-1/2	65	196781
	2	50	197486
CPVC	3	75	197488
	4	100	197489
CPVC LG DIA.	6	150	197490
	8	200	197491

## FGV Tee-Wye H x H x H



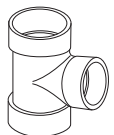
PVC	1-1/2	40	196081
	2	50	196082
	3	75	196083
	4	100	196084
	6	150	196785

## FGV Reducer Tee-Wye H x H x H



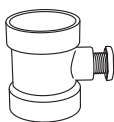
PVC	2 x 1-1/2	50 x 40	196056
	3 x 1-1/2	75 x 40	196061
	3 x 2	75 x 50	196185
	4 x 2	100 x 50	196184

## FGV Reducer Tee H x H x H



PVC	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
CPVC LG DIA.	6 x 6 x 4	150 x 150 x 100	197506
	8 x 8 x 6	200 x 200 x 150	197567

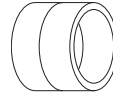
## FGV Access Tee H x H x FTP



PVC	1-1/2	40	196510
	2	50	196511
	3	75	196512
	4	100	196513
CPVC	1-1/2	40	197510
	2	50	197511
	3	75	197512
	4	100	197513

Material	Dimension		Product Code
	inches	mm	

## FGV Coupling H x H



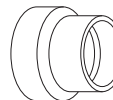
PVC	1-1/2	40	196452
	2	50	196352
	2-1/2	65	196454
	3	75	196353
	4	100	196354
CPVC	6	150	196142
	2	50	197026
	3	75	197027
	4	100	197023
CPVC LG DIA.	6	150	197141
	8	200	197142

## FGV Deep Socket Coupling H x H



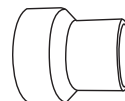
PVC	2	50	196453
	3	75	196455
CPVC	1-1/2	40	197136
	2	50	197137
	2-1/2	65	197138
	3	75	197139
	4	100	197140

## FGV Increaser Coupling H x H



PVC	2 x 1-1/2	50 x 40	196362
	3 x 2	75 x 50	196364
	4 x 2	100 x 50	196365
	4 x 3	100 x 75	196366
CPVC	6 x 4	150 x 100	196367
	3 x 2	75 x 50	197470
	4 x 3	100 x 50	197472

## FGV Appliance Adapter H x SP



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

## PRODUCT SELECTION CHART - SYSTEM 636

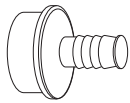
Material	Dimension		Product Code
	inches	mm	

### FGV Reducer Bushing SP x H



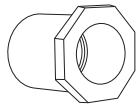
PVC	1-1/2 x 1/2	40 x 15	196653
	2 x 1-1/2	50 x 40	196282
	2-1/2 x 1-1/2	65 x 40	196666
	2-1/2 x 2	65 x 50	196667
	3 x 2	75 x 50	196284
	3 x 2-1/2	75 x 65	196673

### FGV Reducer Bushing Sp x Hose Barb



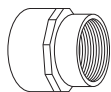
PVC	1-1/2 x 1/2	40 x 15	196278
CPVC	1-1/2 x 1/2	40 x 15	197278

### FGV HEX Head Reducer Bushing Sp x H



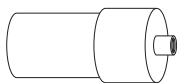
PVC	3 x 2	75 x 50	196672
	2 x 1/2	50 x 15	197385
	2 x 3/4	50 x 20	197386
	2 x 1-1/2	50 x 40	197389
	3 x 2	75 x 50	197394
CPVC	3 x 2-1/2	75 x 65	197395
	4 x 2	100 x 50	197396
	6 x 4	150 x 100	197400
CPVC LG DIA.	8 x 6	200 x 150	197401

### FGV Female Thread Adapter H x FPT



PVC	2	50	196564
CPVC	2	50	197224

### FGV Condensate Drain Assembly Sp x FPT

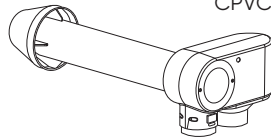


CPVC	4 x 1/2	100 x 15	197002
LG DIA.	6 x 1/2	150 x 15	197003

Material	Dimension		Product Code
	inches	mm	

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

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



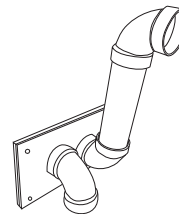
### FGV Concentric Vent Kit



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
CPVC	4 x 36	100 x 900	196021
	2 x 16	50 x 400	197040
	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

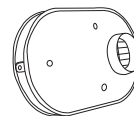
### FGV Wall Termination Kit



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

Vent Screen not included  
Vent Screen not included

### FGV Low Profile Termination Kit (Beige)



PVC	2	50	196984
	3	75	196985
	4	100	196986

# PRODUCT SELECTION CHART - SYSTEM 636

	Dimension		Product Code
	inches	mm	

	Volume		Product Code
	imperial	litres	

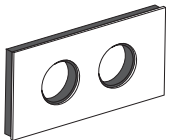
## Faceplate – Round (w/ self sealing foam back)



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

grey matches CPVC

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



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

## Termination Vent Screens



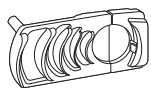
[ 2	50	196050
[ 3	75	196051
[ 4	100	196052
= 6	150	196090
= 8	200	196091

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

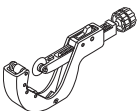
## Deburring Tool (deb 4)



1-1/2 to 4 pipe	40 to 100 pipe	196246
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To ensure quality solvent cement connections, deburr all pipe ends prior to cementing. For guidance on deburring 6" & 8" (150mm & 200mm) pipe, contact IPEX.

## Cutter



1-1/2 to 3	40 to 75	196247
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## PVC cement (LOW VOC)



1/4 pint	118	296366
1 pint	473	196040
1 quart	946	196041

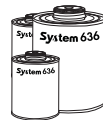
## CPVC cement (LOW VOC)



1 pint	473	196046
1 quart	946	196047

also certified for transitions to PVC

## PVC / CPVC Primer (LOW VOC)



1/4 pint (purple)	118 (purple)	296367
1 pint (purple)	473 (purple)	196042
1 pint (clear)	473 (clear)	196017
1 quart (purple)	946 (purple)	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".
- 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



gallon	3785	074456
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For pipe diameters 6" and larger fits 074425 can.

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