

# FireLock™ Flange Adapter

## Style 744



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### 1.0 PRODUCT DESCRIPTION

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#### Available Sizes

- 2 – 8” (50 – 200mm)

#### Maximum Working Pressure

- For maximum working pressure reference section 4.0 Dimensions

#### Application

- Designed for directly incorporating flanged components with ANSI CL. 125 or CL. 150 bolt hole patterns into a grooved pipe system.
- Designed and recommended for use in fire protection systems only.

#### Pipe Material

- Carbon Steel
- Stainless Steel
- For exceptions reference section 6.0 Notifications

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### 2.0 CERTIFICATION/LISTINGS

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See Victaulic [publication 10.01](#) for details.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

### 3.0 SPECIFICATIONS – MATERIAL

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**Flange Housing:** Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

**Coating:** Black enamel

Optional: Hot dipped galvanized

**Bolts/Nuts:** Supplied by installer

**Gasket:** Grade “E” EPDM - Type A Vic-Plus Gasket System<sup>1</sup>

(Violet color code). FireLock products have been Listed by Underwriters Laboratories Inc. and Approved by Factory Mutual Research for wet and dry (oil free air) sprinkler services up to the rated working pressure using the Grade “E” Type A Vic-Plus Gasket System, requiring no field lubrication for most installation conditions.

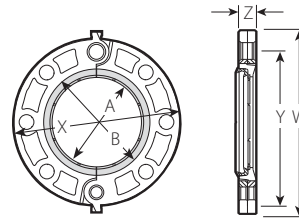
<sup>1</sup> Standard gasket approved for dry pipe systems to –40°F (–40°C). Based on “typical” pipe surface conditions, supplemental lubricant is recommended for services installed below 0°F (-18°C) and for all dry pipe systems or systems to be subjected to air tests prior to being filled with water. Supplemental lubrication may also be required on pipe with raised or undercut weld seams or pipe that has voids and/or cracks at the weld seams.

## 4.0 DIMENSIONS

### Style 744

Sizes 2 – 8" (50 – 200 mm)

ANSI Class 125 and 150 Flange



Pipe Size		Maximum Working Pressure	Maximum End Load	No. Bolts <sup>2</sup> Req'd.	Bolt Size <sup>2</sup>	Sealing Surface		W	X	Y	Z	Weight
Nominal Diameter	Actual Outside Diameter					A Max.	B Min.					Approx. Each
inches	inches	psi	lbs		inches							
mm	mm	kPa	N									
2	2.375	175	775	4	5/8 x 2 3/4	2.38	3.41	6.75	6.00	4.75	0.75	2.7
50	60.3	1200	3450			60	87	172	152	121	19	1.2
2 1/2	2.875	175	1135	4	5/8 x 3	2.88	3.91	7.88	7.00	5.50	0.88	4.2
65	73.0	1200	5050			73	99	200	178	140	22	1.9
3	3.500	175	1685	4	5/8 x 3	3.50	4.53	8.44	7.50	6.00	0.94	4.8
80	88.9	1200	7500			89	115	214	191	152	24	2.2
4	4.500	175	2780	8	5/8 x 3	4.50	5.53	9.94	9.00	7.50	0.94	7.1
100	114.3	1200	11045			114	141	252	229	191	24	3.2
5	5.563	175	4250	8	1/4 x 3 1/2	5.56	6.71	11.00	10.00	8.50	1.00	8.3
125	141.3	1200	18920			141	171	279	254	216	25	3.8
6 <sup>3</sup>	6.625	175	6030	8	1/4 x 3 1/2	6.63	7.78	12.00	11.00	9.50	1.00	9.3
150	168.3	1200	26840			168	198	305	279	241	25	4.2
8 <sup>3</sup>	8.625	175	10219	8	1/4 x 3 1/2	8.63	9.94	14.63	13.50	11.75	1.13	13.9
200	219.1	1200	45475			219	252	372	343	297	29	6.3

<sup>2</sup> Total bolts required to be supplied by installer. Bolt sizes for conventional flange-to-flange connection. Larger bolts are required when Vic-Flange adapter is utilized with wafer-type valves.

<sup>3</sup> Not available with Vic-Plus gasket system. Lubrication is required.

#### NOTES

- Working Pressure and End Load are total, from all internal and external loads, based on standard weight steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.
- WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 1/2 times the figures shown.
- Style 744 FireLock Flange adapters provide rigid joints when used on pipe with standard roll or cut groove dimensions and consequently allow no linear or angular movement at the joint.
- WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

## 5.0 PERFORMANCE

Not applicable. Contact Victaulic for more information.

## 6.0 NOTIFICATIONS

### Important Installation Considerations

1. The Style 744 (2 – 8"/50 – 200 mm) design incorporates small teeth inside the key shoulder I.D. to prevent rotation.
2. FireLock Flange adapter should not be used on FireLock fittings. When wafer or lug-type valves are used adjoining a Victaulic fitting, check disc dimensions to assure proper clearance.
3. FireLock Flange adapters should not be used as anchor points for tie-rods across nonrestrained joints. Mating rubber faced flanges, valves, etc. require the use of a FireLock Flange washer.
4. Area A-B noted in the above drawing must be free from gouges, undulations or deformities of any type for effective sealing.
5. FireLock Flange adapter gaskets must always be assembled with the color coded lip on the pipe and the other lip facing the mating flange.
6. Flange Washers: FireLock Flange adapters require a smooth hard surface at the mating flange face for effective sealing. Some applications for which the Vic-Flange adapter is otherwise well suited do not provide an adequate mating surface. In such cases, it is recommended that a metal Flange Washer be inserted between the FireLock Flange adapter and the mating flange to provide the necessary sealing surface.

### Typical applications where a Flange Washer should be used are:

- A. When mating to a serrated flange: a standard flat flange gasket should be used adjacent to the serrated flange and then the Flange Washer is inserted between the FireLock Flange adapter and the flange gasket.
- B. When mating to a wafer valve: where typical valves are rubber lined and partially rubber faced (smooth or not), the Flange Washer is placed between the valve and the FireLock Flange adapter.
- C. When mating a rubber faced flange: the Flange Washer is placed between the FireLock Flange adapters and the rubber faced flange.
- D. When mating AWWA cast flanges to IPS flanges: the Flange Washer is placed between two FireLock Flanges. The hinge points must be oriented approximately 90° to each other. If one flange is not a FireLock Flange adapter (e.g. flanged valve), then a standard flat flange gasket must be placed adjacent to that flange and the Flange Washer inserted between the flange gasket and the FireLock Flange adapter.
- E. When mating to components (valves, strainers, etc.) where the component flange face has an insert: follow the same arrangement as in Application 1.
- F. When mating to a Series 705-W Butterfly valve, Style 744 may only be used on one side of the connection.

When ordering Flange Washers, always specify product style (Style 744) and size to assure proper Flange Washer is supplied.

### NOTICE

- **Victaulic does not recommend the use of any furnace butt-welded pipe with sizes 2"/DN50 and smaller Victaulic gasketed joint products. This includes, but is not limited to, ASTM A53 Type F pipe.**

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## 7.0 REFERENCE MATERIALS

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[10.01: Regulatory Approval Reference Guide](#)

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### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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### Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

### Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

### Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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