

Victaulic® FireLock™ Installation-Ready™ Fittings No. 101, 102, 103, 104, 143



No. 101



No. 102



No. 103



No. 104



No. 143

1.0 PRODUCT DESCRIPTION

Application

- Patented *Installation-Ready* Fittings for Fire Protection Systems

Available Sizes

- 1 ¼ – 2 ½"/DN32-DN65
- 1" *FireLock* IGS™ *Installation-Ready* Fittings available. See [Publication 10.54](#)

Pipe Material

- Schedule 10, Schedule 40 or Specialty Carbon Steel Pipe listed in [Section 5 – Performance](#). For use with alternative materials and wall thicknesses, contact Victaulic.
- For exceptions reference [Section 6.0 – Notifications](#)

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) to 365 psi/2517 kPa/25 bar

Pipe Preparation

- Roll Grooved, Cut Grooved

2.0 CERTIFICATION/LISTINGS



LPS 1219:
Issue 3.1
Cert/LPCB
Ref. 104-1a/38



G416004



EN 10311
CPR (EU)
No. 305/2011

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



3.0 SPECIFICATIONS - MATERIAL

Fitting Housing: Ductile Iron conforming to ASTM A536, Grade 65-45-12

Housing Coating: (specify choice)

- ☐ Orange Coating
- ☐ Red Coating (standard for EMEA-I and Asia Pacific)
- ☐ Optional: Hot Dipped Galvanized

Gasket:

☐ **Grade “E” EPDM (Type A) *Vic-Plus* Pre-lubricated Gasket**

EPDM (Violet Color Code). Applicable for wet and dry (oil-free air) fire protection systems only. Listed/Approved for continuous use in wet and dry systems. Listed/Approved for dry systems at -40°F/-40°C and above. Not compatible for use with hot water services or steam services.

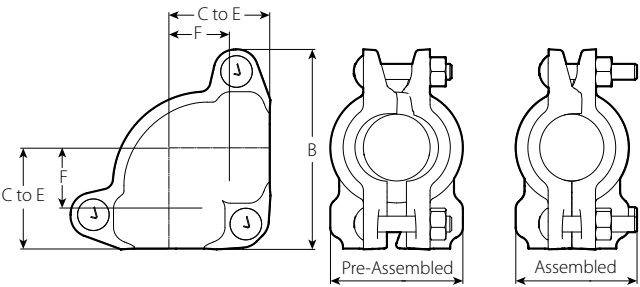
NOTES

- Reference should always be made to [Publication I-100](#), Victaulic Field Installation Handbook for gasket lubrication instructions.
- Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to [Publication 05.01](#), Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

Bolts/Nuts: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the physical and chemical requirements of ASTM A563 Grade B (imperial) and ASTM A563M Class 9 (metric). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn 5, finish Type III (imperial) or Type II (metric).

4.0 DIMENSIONS

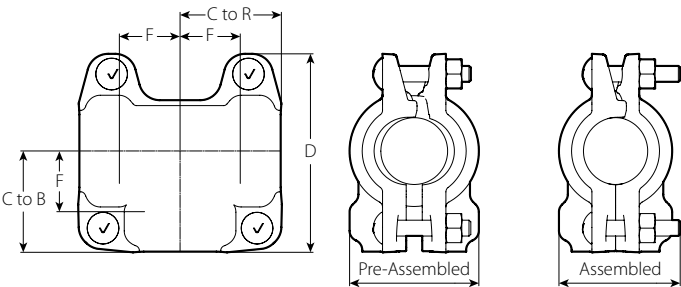
No. 101 Installation-Ready™ 90° Elbow



Size		Bolt/Nut		Dimensions					Weight
Nominal	Actual Outside Diameter	Qty.	Size	F Take Out	C to E	B	Pre-Assembled	Assembled	Approximate (Each)
inches DN	inches mm		inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg
1 ¼ DN32	1.660 42.4	3	¾ x 2 M10 x 50	1.50 38	2.44 62	4.75 121	3.19 81	2.88 73	3.2 1.5
1 ½ DN40	1.900 48.3	3	¾ x 2 M10 x 50	1.56 40	2.56 65	5.00 127	3.50 89	3.06 78	3.7 1.7
2 DN50	2.375 60.3	3	7/16 x 2.75 M11 x 69	1.88 48	2.81 71	5.63 143	4.19 106	3.63 92	5.4 2.4
2 ½	2.875 73.0	3	7/16 x 2.75 M11 x 69	2.13 54	3.06 77	6.13 156	4.63 118	4.06 103	6.4 2.9
DN65	3.000 76.1	3	7/16 x 2.75 M11 x 69	2.19 56	3.13 80	6.19 157	4.75 121	4.19 106	6.6 3.0

4.1 DIMENSIONS

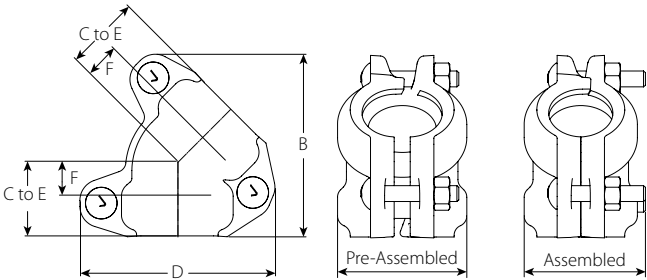
No. 102 Installation-Ready Tee



Size		Bolt/Nut		Dimensions						Weight
Nominal	Actual Outside Diameter	Qty.	Size	F Take Out	C to B	C to R	D	Pre-Assembled	Assembled	Approximate (Each)
inches DN	inches mm		inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg
1 ¼ DN32	1.660 42.4	4	¾ x 2 M10 x 50	1.50 38	2.44 62	2.44 62	4.75 121	3.19 81	2.88 73	4.2 1.9
1 ½ DN40	1.900 48.3	4	¾ x 2 M10 x 50	1.56 40	2.56 65	2.56 65	5.00 127	3.50 89	3.06 78	4.6 2.1
2 DN50	2.375 60.3	4	7/16 x 2.75 M11 x 69	1.88 48	2.88 73	2.88 73	5.50 140	4.19 106	3.63 92	6.4 2.9
2 ½	2.875 73.0	4	7/16 x 2.75 M11 x 69	2.13 54	3.13 80	3.13 80	6.00 152	4.63 118	4.06 103	7.5 3.4
DN65	3.000 76.1	4	7/16 x 2.75 M11 x 69	2.19 56	3.19 81	3.19 81	6.19 157	4.75 121	4.19 106	7.8 3.5

4.2 DIMENSIONS

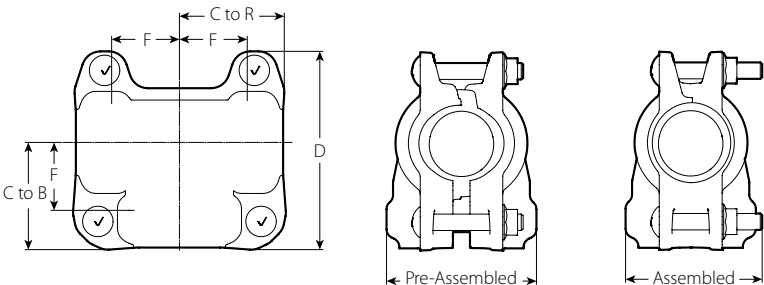
No. 103 Installation-Ready 45° Elbow



Size		Bolt/Nut		Dimensions						Weight
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches mm	F Take Out inches mm	C to E inches mm	B inches mm	D inches mm	Pre- Assembled inches mm	Assembled inches mm	Approximate (Each) lb kg
1 ¼ DN32	1.660 42.4	3	¾ x 2 M10 x 50	0.81 21	1.81 46	4.38 111	4.69 119	3.19 81	2.88 73	2.8 1.3
1 ½ DN40	1.900 48.3	3	¾ x 2 M10 x 50	0.94 24	1.88 48	4.50 114	4.81 122	3.44 87	3.06 78	3.1 1.4
2 DN50	2.375 60.3	3	7/16 x 2.75 M11 x 69	1.00 25	2.00 51	5.00 127	5.44 138	4.19 106	3.63 92	4.4 2.0
2 ½ DN65	2.875 73.0	3	7/16 x 2.75 M11 x 69	1.13 29	2.06 52	5.38 135	5.94 151	4.63 117	4.06 103	4.9 2.2
	3.000 76.1	3	7/16 x 2.75 M11 x 69	1.13 29	2.13 54	5.50 140	6.13 156	4.75 121	4.19 106	5.1 2.3

4.3 DIMENSIONS

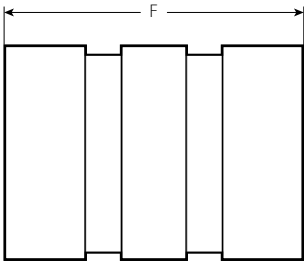
No. 104 Installation-Ready Bullhead Tee



Size		Bolt/Nut		Dimensions						Weight
Nominal inches DN	Actual Outside Diameter inches mm	Qty.	Size inches mm	F Take Out inches mm	C to B inches mm	C to R inches mm	D inches mm	Pre- Assembled inches mm	Assembled inches mm	Approx. (Each) lb kg
1 ½ x 1 ½ x 2 DN40 x DN40 x DN50	1.900 x 1.900 x 2.375 48.3 x 48.3 x 60.3	4	7/16 x 2.75 M11 x 69	1.88 48	2.88 73	2.88 73	5.38 137	4.13 105	3.75 95	7.0 3.2
2 x 2 x 2 ½ DN50 x DN50 x 73.0 mm	2.375 x 2.375 x 2.875 60.3 x 60.3 x 73.0	4	7/16 x 2.75 M11 x 69	2.13 54	3.13 79	3.13 79	5.88 149	4.63 117	4.13 105	8.6 3.9
2 ½ x 2 ½ x 3 73.0 mm x 73.0 mm x DN80	2.875 x 2.875 x 3.500 73.0 x 73.0 x 88.9	4	7/16 x 2.75 M11 x 69	2.38 60	3.50 89	3.50 89	6.50 165	5.25 133	4.75 121	10.8 4.9

4.4 DIMENSIONS

No. 143 Close Nipple (fitting to fitting connections)



Size		Dimensions	Weight
Nominal	Actual Outside Diameter	Takeout F	Approximate (Each)
inches DN	inches mm	inches mm	lb kg
1 ¼ DN32	1.660 42.4	2.37 60	0.4 0.2
1 ½ DN40	1.900 48.3	2.37 60	0.5 0.2
2 DN50	2.375 60.3	2.37 60	0.7 0.3
2 ½	2.875 73.0	2.37 60	1.1 0.5
DN65	3.000 76.1	2.37 60	1.2 0.5

5.0 PERFORMANCE

Friction Flow Data

Size		Flow Data Frictional Resistance Equivalent Length of Sch. 40 Pipe (C=120)				
		Elbows		No. 102 Straight Tee		No. 104 Bullhead Tee
Nominal inches DN	Actual Outside Diameter inches mm	No. 101 90° Elbow ft m	No. 103 45° Elbow ft m	Branch ft m	Run ft m	Branch to Run ft m
1 ¼ DN32	1.660 42.4	2.8 0.9	0.4 0.1	4.0 1.2	0.6 0.2	–
1 ½ DN40	1.900 48.3	2.9 0.9	0.6 0.2	4.0 1.2	0.7 0.2	7.0 2.1
2 DN50	2.375 60.3	3.0 0.9	1.1 0.3	8.0 2.4	1.1 0.3	9.0 2.7
2 ½	2.875 73.0	3.1 0.9	1.5 0.5	8.0 2.4	1.4 0.4	10.0 3.0
DN65	3.000 76.1	3.1 0.9	1.6 0.5	9.0 2.7	1.5 0.5	–

Maximum Working Pressure

Style 101, 102, 103

Size		cULus		FM		Vds	LPCB
Nominal inches DN	Actual Outside Diameter inches mm	Sch.10 psi kPa	Sch.40 psi kPa	Sch.10 psi kPa	Sch.40 psi kPa	psi kPa	psi kPa
1 ¼ DN32	1.660 42.4	300 2068	300 2068	365 2517	365 2517	363 2503	363 2503
1 ½ DN40	1.900 48.3	300 2068	300 2068	365 2517	365 2517	363 2500	363 2503
2 DN50	2.375 60.3	300 2068	300 2068	365 2517	365 2517	363 2503	363 2503
2 ½	2.875 73.0	300 2068	300 2068	365 2517	365 2517	363 2503	363 2503
DN65	3.000 76.1	300 ¹ 2068	–	365 2517	–	–	363 2503

¹ cULus Listed for EN 10217 2.9mm pipe wall

Style 104

Size		cULus		FM	
Nominal inches DN	Actual Outside Diameter inches mm	Sch.10 psi kPa	Sch.40 psi kPa	Sch.10 psi kPa	Sch.40 psi kPa
1 ½ x 1 ½ x 2 DN40 x DN40 x DN50	1.900 x 1.900 x 2.375 48.3 x 48.3 x 60.3	300 2068	300 2068	365 2517	365 2517
2 x 2 x 2 ½ DN50 X DN50 X 73.0 mm	2.375 x 2.375 x 2.875 60.3 x 60.3 x 73.0	300 2068	300 2068	365 2517	365 2517
2 ½ X 2 ½ X 3 73.0 mm x 73.0 mm x DN80	2.875 x 2.875 x 3.500 73.0 x 73.0 x 88.9	300 2068	300 2068	365 2517	365 2517

5.1 PERFORMANCE

Listing/Approvals

Specialty Pipe

Style 101

Pipe	Sizes inches DN	Max Working Pressure	
		cULus psi kPa	FM psi kPa
ET	1 – 2 DN25 – DN50	–	300 2068
MT	1 – 2 DN25 – DN50	–	300 2068
MLT	1 – 2 DN25 – DN50	300 2068	300 2068
EZT	1 – 2 DN25 – DN50	–	300 2068
EF	1 ¼ – 2 ½ DN32 – 73.0 mm	300 2068	300 2068
TF	1 ¼ – 2 ½ DN32 – 73.0 mm	–	300 2068
MF	1 ¼ – 2 ½ DN32 – 73.0 mm	300 2068	300 2068
FF	1 ½ – 2 ½ DN40 – 73.0 mm	300 2068	300 2068
BEF	1 – 2 DN25 – DN50	–	300 2068
EN10217	DN65	300 2068	–

NOTES

- ET: For use with Bull Moose Tube EDDY-Thread Threadable Thinwall Sprinkler Pipe
- MT: For use with Wheatland Tube Mega-Thread Threadable Thinwall Sprinkler Pipe
- MLT: For use with Wheatland Tube MLT Threadable Thinwall Sprinkler Pipe
- EZT: For use with Youngstown Tube EZ-Thread Threadable Thinwall Sprinkler Pipe
- EF: For use with Bull Moose Tube EDDY-Flow Non-Threadable Lightwall Sprinkler Pipe
- TF: For use with Tex-Tube Tex Flow Non-Threadable Lightwall Sprinkler Pipe
- MF: For use with Wheatland Tube Mega-Flow Non-Threadable Lightwall Sprinkler Pipe
- FF: For use with Youngstown Tube Fire-Flo Non-Threadable Lightwall Sprinkler Pipe
- BEF: For use with Borusan Mannesmann Easy-Flow Non-Threadable Lightwall Sprinkler Pipe
- EN10217: Refers to steel pipe manufactured in accordance with EN10217.

5.1 PERFORMANCE (CONTINUED)

Style 102

Pipe	Sizes inches DN	Max Working Pressure	
		cULus psi kPa	FM psi kPa
ET	1 – 2 DN25 – DN50	–	300 2068
MT	1 – 2 DN25 – DN50	–	300 2068
MLT	1 – 2 DN25 – DN50	300 2068	300 2068
EZT	1 – 2 DN25 – DN50	–	300 2068
EF	1 ¼ – 2 ½ DN32 – 73.0 mm	300 2068	300 2068
TF	1 ¼ – 2 ½ DN32 – 73.0 mm	–	300 2068
MF	1 ¼ – 2 ½ DN32 – 73.0 mm	300 2068	300 2068
FF	1 ½ – 2 ½ DN40 – 73.0 mm	300 2068	300 2068
BEF	1 – 2 DN25 – DN50	–	300 2068
EN10217	DN65	300 2068	–

NOTES

- ET: For use with Bull Moose Tube EDDY-Thread Threadable Thinwall Sprinkler Pipe
- MT: For use with Wheatland Tube Mega-Thread Threadable Thinwall Sprinkler Pipe
- MLT: For use with Wheatland Tube MLT Threadable Thinwall Sprinkler Pipe
- EZT: For use with Youngstown Tube EZ-Thread Threadable Thinwall Sprinkler Pipe
- EF: For use with Bull Moose Tube EDDY-Flow Non-Threadable Lightwall Sprinkler Pipe
- TF: For use with Tex-Tube Tex Flow Non-Threadable Lightwall Sprinkler Pipe
- MF: For use with Wheatland Tube Mega-Flow Non-Threadable Lightwall Sprinkler Pipe
- FF: For use with Youngstown Tube Fire-Flo Non-Threadable Lightwall Sprinkler Pipe
- BEF: For use with Borusan Mannesmann Easy-Flow Non-Threadable Lightwall Sprinkler Pipe
- EN10217: Refers to steel pipe manufactured in accordance with EN10217.

5.1 PERFORMANCE (CONTINUED)

Style 103

Pipe	Sizes inches DN	Max Working Pressure	
		cULus psi kPa	FM psi kPa
ET	1 – 2½ DN25 – 73.0 mm	–	300 2068
MT	1 – 2½ DN25 – 73.0 mm	–	300 2068
MLT	1 – 2½ DN25 – 73.0 mm	–	300 2068
	1 – 2 DN25 – DN50	300 2068	–
EZT	1 – 2½ DN25 – 73.0 mm	–	300 2068
EF	1¼ – 2½ DN32 – 73.0 mm	300 2068	300 2068
TF	1¼ – 2½ DN32 – 73.0 mm	–	300 2068
MF	1¼ – 2½ DN32 – 73.0 mm	300 2068	300 2068
FF	1½ – 2½ DN40 – 73.0 mm	300 2068	300 2068
BEF	1 – 2 DN25 – DN50	–	300 2068
EN10217	DN65	300 2068	–

NOTES

- ET: For use with Bull Moose Tube EDDY-Thread Threadable Thinwall Sprinkler Pipe
- MT: For use with Wheatland Tube Mega-Thread Threadable Thinwall Sprinkler Pipe
- MLT: For use with Wheatland Tube MLT Threadable Thinwall Sprinkler Pipe
- EZT: For use with Youngstown Tube EZ-Thread Threadable Thinwall Sprinkler Pipe
- EF: For use with Bull Moose Tube EDD-Flow Non-Threadable Lightwall Sprinkler Pipe
- TF: For use with Tex-Tube Tex Flow Non-Threadable Lightwall Sprinkler Pipe
- MF: For use with Wheatland Tube Mega-Flow Non-Threadable Lightwall Sprinkler Pipe
- FF: For use with Youngstown Tube Fire-Flo Non-Threadable Lightwall Sprinkler Pipe
- BEF: For use with Borusan Mannesmann Easy-Flow Non-Threadable Lightwall Sprinkler Pipe
- EN10217: Refers to steel pipe manufactured in accordance with EN10217.

5.1 PERFORMANCE (CONTINUED)

Style 104

Pipe	Sizes inches DN	Max Working Pressure	
		cULus psi kPa	FM psi kPa
ET	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
MT	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½ DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm	300 2068	–
MLT	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½ DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm	300 2068	–
EZT	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½ DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm	300 2068	–
EF	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	300 2068	300 2068
TF	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
MF	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	300 2068	300 2068
FF	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	–	300 2068
	2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	300 2068	–
BEF	1 ½ x 1 ½ x 2, 2 x 2 x 2 ½, 2 ½ x 2 ½ x 3 DN40 x DN40 x DN50, DN50 x DN50 x 73.0 mm, 73.0 mm x 73.0 mm x DN80	300 2068	300 2068

NOTES

- ET: For use with Bull Moose Tube EDDY-Thread Threadable Thinwall Sprinkler Pipe
- MT: For use with Wheatland Tube Mega-Thread Threadable Thinwall Sprinkler Pipe
- MLT: For use with Wheatland Tube MLT Threadable Thinwall Sprinkler Pipe
- EZT: For use with Youngstown Tube EZ-Thread Threadable Thinwall Sprinkler Pipe
- EF: For use with Bull Moose Tube EDDY-Flow Non-Threadable Lightwall Sprinkler Pipe
- TF: For use with Tex-Tube Tex Flow Non-Threadable Lightwall Sprinkler Pipe
- MF: For use with Wheatland Tube Mega-Flow Non-Threadable Lightwall Sprinkler Pipe
- FF: For use with Youngstown Tube Fire-Flo Non-Threadable Lightwall Sprinkler Pipe
- BEF: For use with Borusan Mannesmann Easy-Flow Non-Threadable Lightwall Sprinkler Pipe
- EN10217: Refers to steel pipe manufactured in accordance with EN10217.

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

[10.54: FireLock™ Innovative Groove System IGS](#)

[I-101-103 Installation Instructions](#)

[I-102-104 Installation Instructions](#)

[I-ENDCAP: Victaulic End Cap Installation Instructions](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 [victaulic.com](#).

Warranty

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

Intellectual Property Rights

No statement concerning the use of any material, product, service, or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Victaulic or any of its affiliates, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries. Victaulic and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.

Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.