# CPVC HOT & COLD WATER DISTRIBUTION SYSTEMS

1/2" - 4" (12mm - 100mm)



While contractors and engineers have traditionally had few viable alternatives to increasingly-expensive metal for their water distribution systems, IPEX Inc. now offers a solution that ensures time and cost-savings without sacrificing the strength or performance. With AquaRise, IPEX introduces a CPVC hot and cold water distribution system that comes with reduced material costs, offers superior features and exceeds all industry testing standards.

#### A SOLID ALTERNATIVE TO METAL

Compare AquaRise to traditional metal systems, and AquaRise proves itself a strong, highly-engineered and affordable improvement over copper. Manufactured tough and robust, AquaRise performs as well as—and in many cases, better than—metal, offering a rugged system that exceeds all required standards. At the same time, AquaRise costs less than copper, yielding significant project savings. Thanks to its superior durability, these cost savings will pay off even more in years to come. AquaRise's corrosion resistance ensures a longer, maintenance-free life and better performance over the long-term.

#### PROJECT SAVINGS

IPEX created AquaRise to be a system that saves valuable time and money on the jobsite. Even greater savings can be achieved by using SDR 21 AquaRise, which is designed specifically for cold water applications. Its simple solvent cement system makes AquaRise fast and easy to assemble. No product specific training is needed, and no flames or torches are required during installation, reducing jobsite safety risks. In addition, AquaRise sweats less than metal pipe due to its excellent insulating properties. As a result, it can reduce the need for insulation, lowering overall job costs. AquaRise also

Proven strength, competitive price, easy installation – what all this adds up to is significant time and cost-savings for contractors and building owners over the long term.

represents a lower risk of jobsite theft.

#### **APPLICATIONS**

- Potable Water Distribution
- Hot Water Recirculating Systems

#### **STANDARDS**



Certified to ASTM F442 and CSA B137.6



Certified to CAN/ULC-S102.2

# DID YOU KNOW?

AquaRise interior and exterior walls remain smooth in virtually any service condition, unlike metal which, over time, will rust, pit, scale and corrode.



# **ADVANTAGES**

Proven to Exceed Toughest Standards
Thanks to its advanced materials and rugged design,
AquaRise SDR 11 for hot water provides long term
pressure ratings of 400 psi at 73°F (23°C) and 150 psi
at 160°F (71°C). AquaRise SDR 21 for cold water use
provides a long-term pressure rating of 200 psi at
73°F (23°C), meeting the requirements of CSA B137.6.
AquaRise passes the punishing burst pressure tests
conforming to ASTM F442.

# Better Long-Term Performance

Unlike metal piping which may pit, scale and degrade over time, AquaRise's rugged thicker walls and excellent corrosion resistance ensure years of consistent flow and maintenance-free performance, even in demanding hot water recirculation applications.

# Fully-Certified

Designed to be safely used in hot and cold water distribution systems, AquaRise is certified to the following:

- CSA B137.6 (CPVC Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems)
- NSF 61 (Potable Water Classification)
- CAN/ULC S102.2

# 4) Full Flame & Smoke Approvals

Listed to the CAN/ULC S102.2 standard, AquaRise achieved a Flame Spread rating of not more than 25 and a Smoke Development classification of not more than 50. Unlike competitive products, AquaRise does not need insulation to achieve certification. Ideal for noncombustible applications, AquaRise is code compliant to the following sections of the National Building Code of Canada:

- High buildings as defined by NBC article 3.2.6
- Air plenums as defined by NBC article 3.6.4.3
- Noncombustible buildings as defined by NBC article 3.1.5.16

# Permanent Joining System IPEX supplies high quality CPVC cement, primer and applicators for enabling tough, permanent welded pipe-fitting connections.

# **SPECIFICATIONS**

#### **AQUARISE PIPE & FITTINGS**

AquaRise pipe and fittings are certified to CSA B137.6. When used in noncombustible construction, high buildings and air plenums, AquaRise pipe shall be tested and listed in accordance with CAN/ULC S102.2 and clearly marked with the certification logo indicating a Flame Spread Rating not more than 25 and a Smoke Developed Classification not exceeding 50. Pipe shall be SDR 11 or SDR 21 thickness and IPS outside diameter.

# FIRESTOPPING DEVICES

Firestopping systems shall be listed under CAN/ULC S115 and tested with a pressure differential of 50 Pa. Certified firestopping devices are required whenever the system penetrates a vertical or horizontal fire separation.

ONE-STEP & TWO STEP SOLVENT CEMENTS IPEX has made a significant change to the current solvent cement products to be used with AquaRise Domestic Water Piping. The product offering has been modified to now offer two customized solvent cements for small and large size ranges. Both products are certified to CSA B137.6, listed to NSF 61 and sold as a kit coming complete with necessary applicators and installation instructions.



#### PIPE DIMENSIONS AND WEIGHTS SDR 11

AquaRise pipe is produced (1/2" through 4") in SDR 11 dimensions with IPS (Iron Pipe Size) outside diameters. The SDR (Standard Dimension Ratio) value means that all sizes of pipe maintain a constant ratio between the pipe outside diameter and minimum wall thickness. This results in all diameters carrying the same pressure ratings of 400 psi at 73°F and 150 psi at 160°F.

AquaRise Pipe Dimensions & Weights IPS / SDR 11 (Imperial)

Nominal Size (Inches)	Average OD (Inches)	Average ID (Inches)	Average Wall Thickness (inches)	Weight - Empty lb/ft
1/2	0.840	0.687	0.076	0.130
3/4	1.050	0.859	0.095	0.202
1	1.315	1.076	0.120	0.319
1-1/4	1.660	1.358	0.151	0.507
1-1/2	1.900	1.555	0.173	0.663
2	2.375	1.943	0.216	1.037
2-1/2	2.875	2.352	0.261	1.519
3	3.500	2.864	0.318	2.250
4	4.500	3.633	0.434	3.722

AquaRise Pipe Dimensions & Weights IPS / SDR 11 (Metric)

Nominal Size (mm)	Average OD (mm)	Average ID (mm)	Average Wall Thickness (mm)	Weight - Empty Kg/m
12	21.3	17.5	1.9	0.19
19	26.7	21.8	2.4	0.30
25	33.4	27.3	3.0	0.47
32	42.2	34.5	3.8	0.76
40	48.3	39.5	4.4	0.99
50	60.3	49.4	5.5	1.55
65	73.0	59.7	6.6	2.26
75	88.9	72.7	8.1	3.35
100	114.3	92.3	11.0	5.55

#### PIPE DIMENSIONS AND WEIGHTS SDR 21

AquaRise SDR 21 pipe is produced (1-1/2" through 4") in SDR 21 dimensions with IPS (Iron Pipe Size) outside diameters. The SDR (Standard Dimension Ratio) value means that all sizes of pipe maintain a constant ratio between the pipe outside diameter and minimum wall thickness. This results in all diameters carrying the same pressure ratings of 200 psi at 73°F.

AquaRise Pipe Dimensions & Weights IPS / SDR 21 (Imperial)

Nominal Size (Inches)	Average OD (Inches)	Average ID (Inches)	Average Wall Thickness (inches)	Weight - Empty lb/ft
1-1/2	1.900	1.802	0.100	0.33
2	2.375	2.251	0.123	0.52
2-1/2	2.875	2.727	0.147	0.76
3	3.500	3.323	0.177	1.13
4	4.500	4.273	0.227	1.94

AquaRise Pipe Dimensions & Weights IPS / SDR 21 (Metric)

Nominal Size (Inches)		Average ID (Inches)	Average Wall Thickness (inches)	Weight - Empty Ib/ft
40	48.3	45.76	2.54	0.50
50	60.3	57.18	3.12	0.78
65	73.0	69.27	3.73	1.14
75	88.9	84.41	4.50	1.68
100	114.3	108.53	5.77	2.89

# PRODUCT SELECTION CHART

Dimension		Product
inches	mm	Code

AquaRise CPVC SDR 11 Pipe 10 Ft. Lengths, PE x PE



1/2	12	119100
3/4	20	119101
1	25	119102
1-1/4	32	119103
1-1/2	40	119104
2	50	119105
2-1/2	65	119106
3	75	119107
4	100	119108

Dimension	Product	
inches mm	Code	

119120

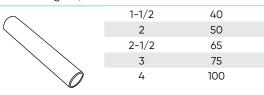
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119122

119123

119124

# AquaRise CPVC SDR 21 (Cold Water) Pipe 10 Ft. Lengths, PE x PE



# PRODUCT SELECTION CHART

	Dimension		Product
	inches	mm	Code
Tee Soc x Soc x So	oc .		
	1/2	12	359481
	3/4	20	359482
	1	25	359483
	1-1/4	32	359484
	1-1/2	40	359485
	2	50	359486
	2-1/2	65	359487
	3	75	359488
	4	100	359489

# Reducing Tee Soc x Soc x Soc



)(	JC X 30C X 30C		
	3/4 x 1/2 x 1/2	20 x 12 x 12	359514
	$3/4 \times 1/2 \times 3/4$	20 x 12 x 20	359513
	$3/4 \times 3/4 \times 1/2$	20 x 20 x 12	359492
	$1 \times 1 \times 1/2$	25 x 25 x 12	359493
	$1 \times 1 \times 3/4$	25 x 25 x 20	359494
	1-1/4 x 1-1/4 x 1	32 x 32 x 25	359495
	1-1/2 x 1-1/2 x 1/2	40 x 40 x 12	359515
	1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	359496
	1-1/2 x 1-1/2 x 1	40 x 40 x 25	359497
	2 x 2 x 1/2	50 x 50 x 12	359498
	$2 \times 2 \times 3/4$	50 x 50 x 20	359499
	2 x 2 x 1	50 x 50 x 25	359500
	$2 \times 2 \times 1-1/2$	50 x 50 x 40	359501
	2-1/2 x 2-1/2 x 1/2	65 x 65 x 12	359503
	$2-1/2 \times 2-1/2 \times 3/4$	65 x 65 x 20	359504
	2-1/2 x 2-1/2 x 1	65 x 65 x 25	359505
	$2-1/2 \times 2-1/2 \times 1-1/4$	65 x 65 x 32	359506
	$2-1/2 \times 2-1/2 \times 2$	65 x 65 x 50	359507
	3 x 3 x 2	75 x 75 x 50	359502
	4 x 4 x 2	100 x 100 x 50	359508
	4 x 4 x 3	100 x 100 x 75	359509

# $U \ Do-It \ Manifold \ Soc \ x \ Sp \ x \ Soc$



$3/4 \times 3/4 \times 1/2 \times 1/2$	359060
$3/4 \times 3/4 \times 1/2$	359061



# 45° Elbow Soc x Soc



1/2	12	359164
3/4	20	359165
1	25	359166
1-1/4	32	359167
1-1/2	40	359168
2	50	359169
2-1/2	65	359170
3	75	359171
4	100	359172

_			
	Dimer	nsion	Product
	inches	mm	Code
90° Elbow Soc x So	oc		
	1/2	12	359194
	3/4	20	359195
	1	25	359196
	1-1/4	32	359197
	1-1/2	40	359198
	2	50	359199
	2-1/2	65	359200
	3	75	359201
	4	100	359202
90° Street Elbow	Soc x Sp		
	1/2	12	359175
0 / 1 / 1	3/4	20	359476
	1	25	359177
Coupling Soc x So	С		
	1/2	12	359132
	3/4	20	359133
	1	25	359134
	1-1/4	32	359135
	1-1/2	40	359136
	2	50	359137
	2-1/2	65	359138
	3	75	359139
	4	100	359140
Maintenance Cou	pling*		
	1	25	359204
\$\frac{1}{2}\text{\$\frac{1}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}{2}\text{\$\frac{1}\text{\$\frac{1}\text{\$\frac{1}\text{\$\frac{1}\text{\$\frac{1}\text{\$\frac{1}\te	1-1/4	32	359205
(Aa)	1-1/2	40	359206
	2	50	359207
	2-1/2	65	359208
*Torque wrench	3	75	359209
kits are available		, 0	750010

# Reducer Coupling Soc x Soc



through IPEX

000 / 000		
3/4 x 1/2	20 x 12	359460
1 x 1/2	25 x 12	359461
1 x 3/4	25 x 20	359462
1-1/4 x 1	32 x 25	359463
$1-1/2 \times 1$	40 x 25	359465
1-1/2 x 1-1/4	40 x 32	359466
2 x 1	50 x 25	359467
2 x 1-1/2	50 x 40	359458
3 x 2	75 x 50	359470
4 x 2	100 x 50	359459
4 x 3	100 x 75	359472

100

359210

# DISTRIBUTION

12

# PRODUCT SELECTION CHART

Dimension		ct
es	Code	е
es	Code	7

# Reducer Bushing Sp x Soc



20 x 12	359375
25 x 12	359376
25 x 20	359377
32 x 12	359378
32 x 20	359379
32 x 25	359380
40 x 12	359381
40 x 20	359382
40 x 25	359383
40 x 32	359384
50 x 12	359385
50 x 20	359386
50 x 25	359387
50 x 32	359388
50 x 40	359389
65 x 20	359390
65 x 25	359391
65 x 50	359392
75 x 40	359393
75 x 50	359394
75 x 65	359395
100 x 32	359428
100 x 40	359429
100 x 50	359396
100 x 65	359430
100 x 75	359397
	25 x 12 25 x 20 32 x 12 32 x 20 32 x 25 40 x 12 40 x 20 40 x 25 40 x 32 50 x 12 50 x 20 50 x 25 50 x 32 50 x 40 65 x 20 65 x 25 65 x 50 75 x 40 75 x 50 75 x 65 100 x 32 100 x 40 100 x 50 100 x 65

# Cap Soc



1/2	12	359109
3/4	20	359110
1	25	359111
1-1/4	32	359112
1-1/2	40	359113
2	50	359114
2-1/2	65	359115
3	75	359116
4	100	359107

# Union Soc x Soc



1/2	12	359520
3/4	20	359521
1	25	359522
1-1/4	32	359523
1-1/2	40	359524
2	50	359525
3	75	359051
4	100	359550

Dimension Produ	Dimension	
inches mm Code	inches	

# Flange Soc Solid Style



1/2	12	359228
3/4	20	359229
1	25	359230
1-1/4	32	359231
1-1/2	40	359232
2	50	359233
2-1/2	65	359234
3	75	359235
4	100	359236

# Vanstone Flange Soc



4	100	359270

# Repair Flange Solid Style Flange x Pipe Stub



2-1/2	65	359057
3	75	359058
4	100	359059

# Full Pressure Flange Kit



2-1/2	65	359040
3	75	359041

# CPVC Copper Tube Size Adapter (CTS)



AquaRise <b>Spigot</b> x CTS	Spigot
1/2	359100
3/4	359101
AquaRise <b>Socket</b> x CTS	S Spigot
1/2	359097
3/4	359098

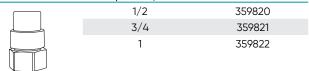
# Female Threaded Adapter Soc x Bronze FNPT



1/2	359800
3/4	359801
1	359802
1-1/4	359803
1-1/2	359804
2	359805

# PRODUCT SELECTION CHART

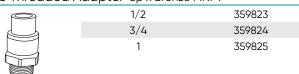
# Female Threaded Adapter Sp x Bronze FNPT



# Male Threaded Adapter Soc x Bronze MNPT

1/2	359811
3/4	359812
1	359813
1-1/4	359814
1-1/2	359815
2	359816

# Male Threaded Adapter Sp x Bronze MNPT



# Repair Threaded Adapter Sp x Bronze MNPT



1	359063
1-1/4	359064
1-1/2	359077
2	359065

#### One-Piece Ball Valve Soc x Soc



1/2	359070
3/4	359071
1	359072

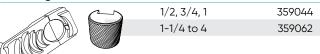
Rated to 400 psi @ 73°F (23°C) Rated to 150 psi @ 160°F (71°C)

# True Union Ball Valve Soc x Soc



1/2	12	359000
3/4	20	359001
1	25	359002
1-1/4	32	359003
1-1/2	40	359004
2	50	359005
2-1/2	65	359102
3	80	359103
4	100	359104

# **Beveling Tools**



Description		Product
imperial	metric	Code

# AquaRise One-Step Cement\*\*



Pint	473 ml	359086
Quart	946 ml	359092
Gallon	3785 ml	359091

<sup>\*\*</sup>FOR USE ON 1/2" TO 2"

# AquaRise Two-Step Cement w/Primer\*\*\*



	,	
Quart	946 ml	359087
Gallon	3785 ml	359093

<sup>\*\*\*</sup>FOR USE ON 2-1/2", 3" & 4"

Cement products come complete with Primer as required plus extra daubers

Nominal Pipe Size	Product
(inches)	Code
(inches)	Code

# Can-Mate Daubers (with telescoping stem)



CM-75 (pipe sizes 1/2" - 1-1/4") 07	74436
CM-150 (pipe sizes 1-1/2" - 3") 07	74437

# Cap Daubers



DP 50 (pipe sizes 1/2" - 1")	074455
DP 150 (pipe sizes 1-1/4" - 3")	074421
DQ 50 (pipe sizes 1/2" - 1")	074193
DQ 150 (pipe sizes 1-1/4" - 3")	074422

Note: DP fits Pint cans and DQ fits Quart cans

#### Swab



4"	100 mm	074456

# AquaRise Superswab Replacement



Swab is disposable and replaceable

359826