



## CROWN CPVC

WORLD CLASS CPVC PIPES & FITTINGS for superior fire protection system.



# "MAXIMUM SAFETY & PROTECTION"





### **Flammability**

Crown CPVC is suitable for wet, automatic, fire sprinkler system because of its execellent balance of properties such as lightweigh, excellent corrosion resistance, low friction loss, and easy installation. It is unique in that it offers outstanding resistance to fire and low smoke generation qualities.

Nominal diameter	external diameter (mm)	internal diameter (mm)	thickness (mm)
1" (25)	33,40 ~ 33,50	28,02	$2.46 \sim 2.97$
1-1/4" (32)	42.20 ~ 42.30	35,50	$3.12 \sim 3.63$
1-1/2" (40)	48.25 ~ 48.35	40,63	$3.58 \sim 4.09$
2" (50)	60.30 ~ 60.40	50,88	$4.47 \sim 5.00$
2-2/1" (65)	73.08 ~ 73.18	61,65	$5.41 \sim 6.07$
3" (80)	89.00 ~ 89.10	75,10	$6.58 \sim 7.37$
4" (100)	114.40 ~ 114.50	96,51	$8.46 \sim 9.48$

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CPVC

Nominal Size		Outside Diameter (OD)			Wall Thickness (T)				The state of the s	
		Average		Tolera	Tolerance		Minimum		nce	Allowable Water Pressure Rating at 73°F / 22.7°C
in	mm	mm	mm	mm	mm	in	mm	in	mm	Trossare nating at 70 1 7 EE.7 C
1/2"	15	0.840	21.3	±0.004	0.10	0.062	1.57	+0.02	0.51	
3/4"	20	1.050	26.7	±0.004	0.10	0.078	1.98	+0,02	0.51	
1"	25	1.315	33.4	±0.005	0.13	0.097	2.46	+0.02	0.51	315 PSI (22.22 kg/cm²)
1-1/4"	32	1.660	42.2	±0.005	0.13	0.123	3.12	+0.02	0.51	
1-1/2"	40	1.900	48.2	±0.006	0.15	0.141	3.58	+0.02	0.51	
2"	50	2.375	60.3	±0.006	0.15	0.176	4.47	+0.021	0.53	(EELEE Kg/CIII)
2-1/2"	65	2.875	73.0	±0.007	0.18	0.213	5.41	+0.026	0.66	
3"	80	3.500	88.9	±0.008	0.20	0.259	6.58	+0.031	0.79	
4"	100	4.500	114.3	±0.009	0.23	0.333	8.46	+0.04	1.02	

Surface roughness constant for other piping material are given below:

$$f=0.2083 \left(\frac{100}{C}\right)^{1.85} \frac{g \ 1.852}{d \ 4.8655}$$

Where f = friction head in feet of water per 100 feet of pipe

d = inside diameter of pipe in inches

g = flow rate in gallons per minute

c = pipe surface roughness constant

### Constant (C) Type of Pipe

150 CPVC Pipe, new-40 Years

130-140 Steel/Cast Iron Pipe, New

125 Steel Pipe, old

120 Cast Iron, 4-12 years old

110 Galvanized Steel/Cast Iron 13-20 Years

60-80 Cast Iron, Worn/Pitted

### CROWN® CPVC FITTINGS



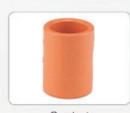
Equal Tee

Size		
25mm	32mm	
40mm	50mm	
65mm	80mm	
	100mm	



Elbow

Size				
25mm	32mm			
40mm	50mm			
65mm	80mm			
	100mm			



Socket

Size		
25mm	32mm	
40mm	50mm	
65mm	80mm	
	100mm	



Reducer

Size		
32X25mm	40X25mm	
40X32mm	50X25mm	
50X40mm	65X40mm	
65X50mm	80X40mm	
80X50mm	80X65mm	
100X80mm		



BRT

Size					
32X25mm	40X25mm	40X32mm			
50X25mm	50X32mm	50X40mm			
65X25mm	65X32mm	65X40mm			
65X50mm	80X25mm	80X40mm			
80X50mm	80X65mm	100X80mm			



45° Elbow

Size				
	25mm	32mm		
	40mm	50mm		
	65mm	80mm		



30° Elbow / 60° Elbow

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S	
25mm	32mm
40mm	50mm



Valve Socket(PT)

Size				
25mm	32mm			
40mm	50mm			
65mm	80mm			



Valve Socket (for connecting SP Joint)

25mm



M,F Valve Socket, F Elbow

Size	
26	



Fittings for PT

Size		
Socket	25mmX1/2" (15mm)	
Elbow	25mmX1/2" (15mm)	
Tee	25mmX1/2" (15mm)	



**BORT** 

Si	ze
32×25×25mm	40×32×25mm
50×40×25mm	



Flange

Si	
40mm	50mm
65mm	80mm
	100mm



Gasket

Si	
40mm	50mm
65mm	80mm



Crown Solvent

Size	
500g	1kg
USA, KOR	USA, KOR



Insert M Valve Socket(STS)

	Size
25mm	50mm



Insert M Valve Socket

(for connecting SP Joint)	
Size	
25mm	

Crown CPVC Pipes and Fittings are designed specifically for fire sprinkler system. They are made from a specialty thermosplastic known chemically as post-chlorinated polyvinyl chloride (CPVC). provide unique advantage in sprinkler installations including superior hydraulics in comparison to traditional metal system, ease of joining, increased hanger spacing in comparison to other thermoplastics and ease of assembly. They also are baed on a technology with a continuous and proven service history of more than 30 years.









### **Application**

- CPVC Light Hazard occupanies as define in the standard for Installation of Sprinkler System, such as CHurhces, Schools, Hotels, Condominiums, Hospital Offices & High Rises.
- Residential occupancies as defined in the Standard for Sprinker System.
- Residential, Multi-story and Multi-family.
- Air plenums, as dfeined by the Installation of Air Conditioning and Ventilating system.
- Underground water pressure service.

Benefit of CROWN CPVC

### Characteristics of Crown CPVC plumbing material

CPVC(Chlorinated Polyvinyl Chloride) pipe is the heat-resistant rigid PVC pipe that made use of excellent chemical resistance, corrosion resistance and workability of Polyvinyl Chloride as they are and significantly improved thermal resistance, its weakness.



### Corrosion resistance and hygiene

- Corrosion and scale do not occur: No rust, no pipe blockage (Proven corrosion in chemical environments such as various acids, alkali, salt, halogen etc.)
- Crown CPVC materials and bonding bond are harmless to humans and ecosystem
- Its antimicrobial material inhibits bacteria production

### Self-extinguishing

- Its own self-extinguishing not catching fire if exposed to it, (For Crown CPVC combustion, more than three times of oxygen amount is required in the air of the current earth)
- When applying the heat, it does not spread flame and is carbonized back.
- Smoke toxic is lower than that of ordinary building materials (Result of the combustion test by Pittsburgh University, California Institute for Environmental Studies).

Materials	limited oxygen rate	
CPVC	60	
cotton	16-17	oxygen
PE	17	content in the air 21%
PP	18	
PS	18	
PB	18	



A QUALITY PRODUCT MANUFACTURED BY:

