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cPVC Pro

PIPE & FITTINGS
Plumbing Piping Solution



HOT & COLD
WATER
Plumbing Solution



ABOUT US

RFL Plastics is a sister concern of PRAN-RFL group. The company was founded by Amjad Khan Chowdhury in 1981 with a vision to leveraging the farmer in irrigation as well as ensuring drinking water through Water Pump & Tube well. After that it commenced its operation in different categories and starts plastics line in 2003. The factory sites are in company owned industrial parks of 300,000 sq. meters including building area of 200,000 which is fully equipped with state of the art injection & blow molding machines with a conversion capacity of over 10000 tons per month.

RFL Plastics currently utilizes 2300 molds through 300 machines having a growth rate of 20% over last year backed by own tooling facilities in the factory premises. The behind growth story of this brand is expansion & availability of innovative & affordable solution for household durables & utensils.

We are a very strong organization of 4500 employees dedicated to supplying customized and quality plastic products globally.



OUR CREDENTIALS

It is our pleasure that we have got several recognitions from local and international organization as the best business enterprise through sustainable growth.



BEST EXPORTER TROPHY
CEO of Pran-RFL Group receiving the award from Honorable Prime Minister of Peoples Republic of Bangladesh



NATIONAL PRODUCTIVITY & QUALITY EXCELLENCE AWARD
ED of RFL Plastic Ltd receiving the award from Former Industries Minister of Peoples Republic of Bangladesh



ABOUT RFL cPVC PRO PIPE & FITTINGS

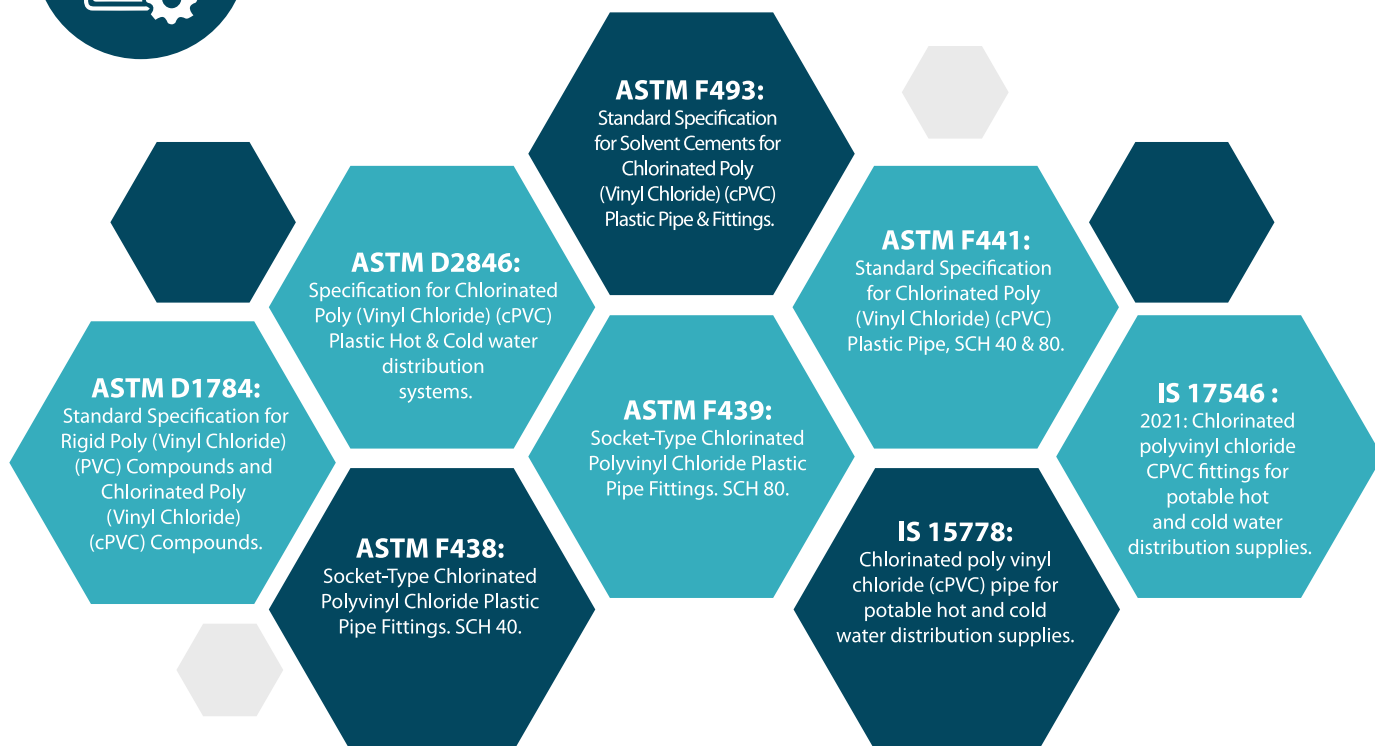
RFL cPVC Pro pipe and fittings are regarded as the finest cPVC pipe and fittings for potable water distribution systems in Bangladesh. It is made of chlorinated polyvinyl chloride (cPVC), which is more flexible than uPVC pipe and can withstand temperatures ranging from 93 to 100 degrees Celsius. Since the 1960s, cPVC piping solutions have been employed for both hot and cold water distribution in the United States, with RFL cPVC Pro pipe demonstrating superior performance when compared to metal and other alternative piping systems

Pipes are produced in copper tube size (CTS) from 15 mm (1/2") to 100 mm (4") with two different standard dimensional ratios - SDR-11 and SDR-13.5. The fittings are produced as per SDR 11. All RFL cPVC Pro Pipe SDR 11 and SDR 13.5 pipes are made from identical cPVC compound material having same physical properties. The cPVC fittings are manufactured from compound material which meets all the requirement as per ASTM standard. cPVC pipes of Copper Tube Size (CTS) dimensions can also be applied to cPVC (IPS) dimensions by using IPS x CTS fittings. The cPVC pipes from 15 mm (1/2") to 100 mm (4") are also produced as per IS 15778 standard in both class that is Class 1 (SDR 11) and Class 2 (SDR 13.5).

Apart from having the same physical properties, SDR 11 and SDR 13.5 which are having different wall thickness and therefore, at any given temperature, they have different pressure ratings



STANDARDS & SPECIFICATIONS

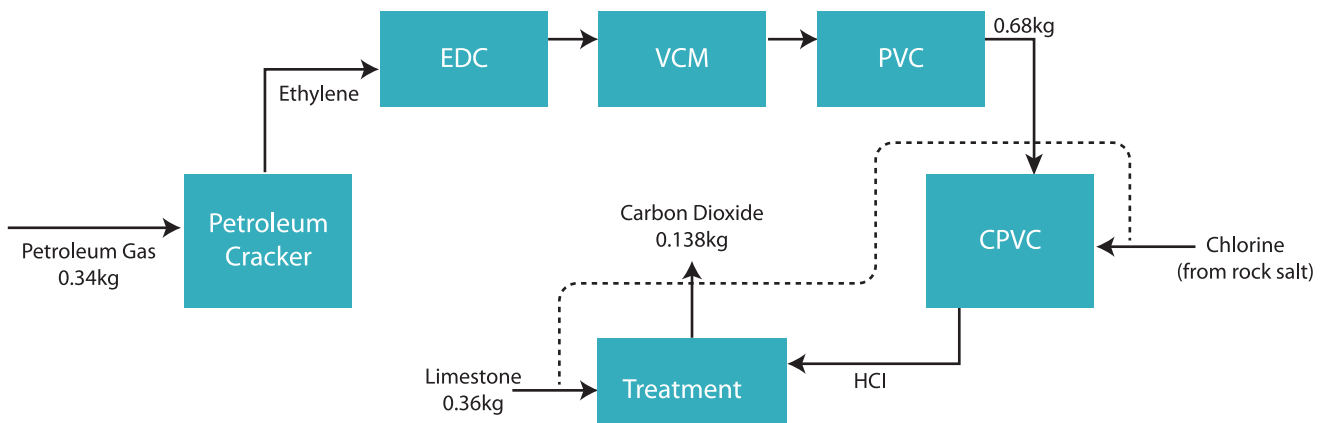


WHY RFL cPVC PRO PIPE & FITTINGS ARE THE BEST CHOICE FOR HOT AND COLD POTABLE WATER DISTRIBUTION ?



THE RAW MATERIAL

RFL cPVC Pro Pipe is a Hot and Cold Potable Water Distribution System made of chlorinated polyvinyl chloride (cPVC) for use in single and multi-family homes, apartments, high-rises, hotel/motels and commercial installations. RFL cPVC Pro Pipe & Fittings has been used for hot and cold water distribution in the United States since 1960. It has a history of superior performance and competitive prices compared to metal and other alternative piping systems. RFL cPVC Pro Pipe & Fittings are joined by solvent cementing which, through chemical bonding, essentially makes the pipe and fitting become one continuous piece. RFL cPVC Pro Pipe & Fittings meets requirements of both ANSI/NSF standard 14-plastic piping system components and related materials-and standard 61- Drinking Water System, components-health affects. Included in these tests are strict standards and strict toxicological review relating to chemical extraction products, taste and odour produced in the water by the piping system.





BASIC PHYSICAL FEATURE

FEATURE	TEST	CONDITION	ENGLISH UNITS	SI UNITS
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GENERAL

• Specific Gravity	ASTM D792	73°F / 23°C	1.55 g/cm ³	1.55 g/cm ³
• Specific Volume		73°F / 23°C	0.645 cm ³ / g	0.645 cm ³ / g
• Water Absorption	ASTM D570	73°F / 23°C	+0.03%	+0.03%
		212°F/100°C	+0.55%	+0.55%
• Rockwell Hardness	ASTM D785	73°F / 23°C	119	
• Cell Class	ASTM D1784		23447-B	

MECHANICAL

• Izod Impact	ASTM D256	73°F / 23°C	1.5 ft lbs/in o.n	80 J/m o.n.
• Tensile Strength	ASTM D638	73°F / 23°C	8000 psi	55 N/mm ²
• Tensile Modulus	ASTM D638	73°F / 23°C	360,000 psi	2500 N/mm ²
• Flexural Strength	ASTM D790	73°F / 23°C	15,100 psi	104 N/mm ²
• Flexural Modulus	ASTM D790	73°F / 23°C	415,000 psi	2860 N/mm ²
• Compressive Strength	ASTM D695	73°F / 23°C	10,100 psi	70 N/mm ²
• Compressive Modulus	ASTM D695	73°F / 23°C	196,000 psi	1350 N/mm ²

THERMAL

• Coefficient of Thermal Expansion	ASTM D696		3.4x10 ⁻⁵ in/in/°F	6.3x10 ⁻⁵ m/m/°K
• Thermal Conductivity	ASTM C177		0.95 BTU in/hr/ft ² /°F	0.14 Wm/°K/m ²
• Heat Distortion Temperature	ASTM D638		217°F	103°C
• Heat Capacity	DSC	73°F / 23°C	0.21 BTU/lb°F	0.90 J/g°K
		212°F / 100°C	0.26 BTU/lb°F	1.10 J/g°K

FLAMMABILITY

• Flammability Rating	UL 94	0.062 in/0.157 cm	V-0, 5VB, 5VA	
• Flame Spread	ASTM E84		15	
• Smoke Developed	ASTM E84		70-125	
• Limiting Oxygen Index	ASTM D2863		60%	

ELECTRICAL

• Dielectric Strength	ASTM D147		1250 V/mil	492,000 V/cm
• Dielectric Constant	ASTM D150	60 Hz, 30°F/-1°C	3.70	3.70
• Power Factor	ASTM D150	1000 Hz	0.007%	0.007%
• Volume Resistivity	ASTM D257	73°F/23°C	3.4x10 ¹⁵ ohm/cm	3.4x10 ¹⁵ ohm/cm



TECHNICAL DETAILS

Outside Diameters and Wall Thicknesses For CPVC 4120, SDR 11 Plastic Pipe As Per ASTM D-2846

Nominal Size		Outside Diameter, in. (mm)		Wall Thickness, in. (mm)		Pressure Rating, PSI (Kg/Cm ²)			
(in.)	(mm)	Average	Tolerance	Minimum	Tolerance	73.4°F	(23°C)	180°F	(82°C)
½*	(15)	0.625 (15.9)	± 0.003 (0.08)	0.068 (1.73)	+ 0.020 (0.51)	400	(28.1)	100	(7.0)
¾	(20)	0.875 (22.2)	± 0.003 (0.08)	0.080 (2.03)	+ 0.020 (0.51)	400	(28.1)	100	(7.0)
1	(25)	1.125 (28.6)	± 0.003 (0.08)	0.102 (2.59)	+ 0.020 (0.51)	400	(28.1)	100	(7.0)
1¼	(32)	1.375 (34.9)	± 0.003 (0.08)	0.125 (3.18)	+ 0.020 (0.51)	400	(28.1)	100	(7.0)
1½	(40)	1.625 (41.3)	± 0.004 (0.10)	0.148 (3.76)	+ 0.020 (0.51)	400	(28.1)	100	(7.0)
2	(50)	2.125 (54.0)	± 0.004 (0.10)	0.193 (4.90)	+ 0.023 (0.58)	400	(28.1)	100	(7.0)

* For ½" wall thickness minimum is not a function of SDR.

Outside Diameters and Wall Thicknesses For CPVC 4120, SDR 13.5 Plastic Pipe

Nominal Size		Outside Diameter, in.(mm)		Wall Thickness, in. (mm)		Pressure Rating, PSI (Kg/Cm ²)			
(in.)	(mm)	Average	Tolerance	Minimum	Tolerance	73.4°F	(23°C)	180°F	(82°C)
½ *	(15)	0.625 (15.9)	± 0.003 (0.08)	0.055 (1.40)	+ 0.020 (0.51)	320	(22.5)	80	(5.6)
¾	(20)	0.875 (22.2)	± 0.003 (0.08)	0.065 (1.65)	+ 0.020 (0.51)	320	(22.5)	80	(5.6)
1	(25)	1.125 (28.6)	± 0.003 (0.08)	0.083 (2.12)	+ 0.020 (0.51)	320	(22.5)	80	(5.6)
1¼	(32)	1.375 (34.9)	± 0.003 (0.08)	0.102 (2.59)	+ 0.020 (0.51)	320	(22.5)	80	(5.6)
1½	(40)	1.625 (41.3)	± 0.004 (0.10)	0.120 (3.06)	+ 0.020 (0.51)	320	(22.5)	80	(5.6)
2	(50)	2.125 (54.0)	± 0.004 (0.10)	0.157 (4.00)	+ 0.023 (0.58)	320	(22.5)	80	(5.6)

* For ½" wall thickness minimum is not a function of SDR.

Outside Diameters, Wall Thickness & Pressure Rating For CPVC 4120, Schedule 40 Piping System As per ASTM F 441

Nominal Size		Outside Diameter, in. (mm)		I.D.	Wall Thickness, in. (mm)		Pipe - Pr. R. PSI (Kg/Cm ²)		Fitting - Pr. R. PSI (Kg/Cm ²)	
(in.)	(mm)	Average	Tolerance	Average	Minimum	Tolerance	73.4°F	(23°C)	73.4°F	(23°C)
2½	(65)	2.875 (73.0)	± 0.007 (0.18)	2.444 (62.07)	0.203 (5.16)	+ 0.024 (0.61)	300	(21.10)	180	(12.65)
3	(80)	3.500 (88.9)	± 0.008 (0.20)	3.041 (77.26)	0.216 (5.49)	+ 0.026 (0.66)	280	(18.28)	156	(10.96)
4	(100)	4.500 (114.3)	± 0.009 (0.23)	3.998 (101.55)	0.237 (6.02)	+ 0.028 (0.71)	220	(15.47)	132	(09.28)

Outside Diameters, Wall Thickness & Pressure Rating For CPVC 4120, Schedul 80 Piping System As per ASTM F 441

Nominal Size		Outside Diameter, in. (mm)		I.D.	Wall Thickness, in. (mm)		Pipe-Pr. R. PSI (Kg/Cm ²)		Fitting-Pr. R. PSI (Kg/Cm ²)	
(in.)	(mm)	Average	Tolerance	Average	Minimum	Tolerance	73.4°F	(23°C)	73.4°F	(23°C)
2½	(65)	2.875 (73.0)	± 0.007 (0.18)	2.288 (58.14)	0.276 (7.01)	+ 0.033 (0.84)	420	(29.53)	252	(17.71)
3	(80)	3.500 (88.9)	± 0.008 (0.20)	2.864 (72.75)	0.300 (7.62)	+ 0.036 (0.91)	370	(26.01)	222	(15.60)
4	(100)	4.500 (114.3)	± 0.009 (0.23)	3.778 (95.97)	0.337 (8.56)	+ 0.040 (1.02)	320	(22.50)	192	(13.49)
6	(150)	6.625 (168.3)	± 0.011 (0.28)	5.710 (145.04)	0.432 (10.97)	+ 0.052 (1.32)	280	(19.69)	168	(11.81)
8	(200)	8.625 (219.1)	± 0.015 (0.38)	7.565 (192.15)	0.500 (12.70)	+ 0.060 (1.52)	250	(17.57)	150	(10.54)
10	(250)	10.750 (273.1)	± 0.015 (0.38)	9.493 (241.12)	0.593 (15.06)	+ 0.071 (1.80)	230	(16.17)	138	(09.70)
12	(300)	12.750 (323.90)	± 0.015 (0.38)	11.294 (286.87)	0.687 (17.45)	+ 0.082 (2.08)	230	(16.17)	138	(09.70)

Temperature Derating Factors

Working Temperature (°F)	73-80	90	100	120	140	160	180	200
Working Temperature (°C)	23-25	32	38	49	60	71	82	93
Pipe Derating Factor	1.00	0.91	0.82	0.65	0.50	0.40	0.25	0.20
Valve Derating Factor	1.00	0.95	0.90	0.80	0.70	0.61	0.53	0.45

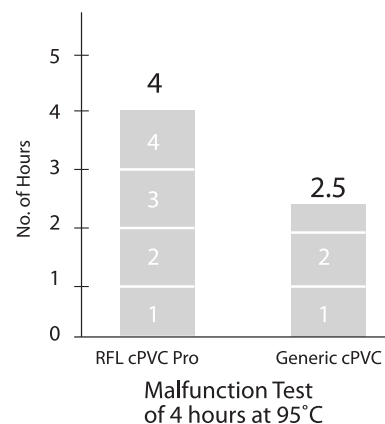
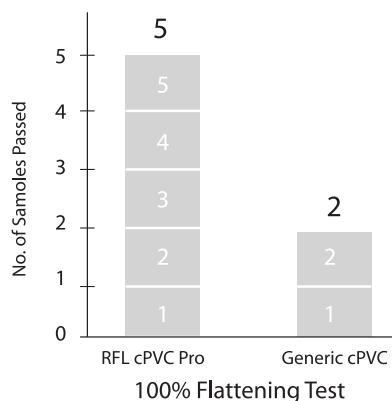
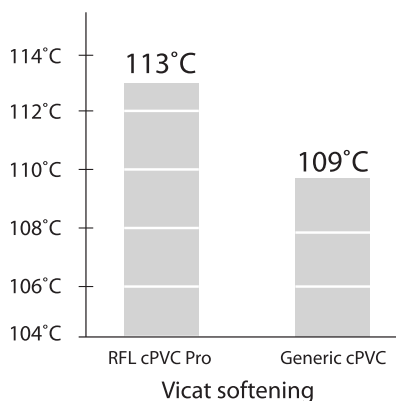


BENEFITS OF RFL cPVC PRO PIPE & FITTINGS

Features and benefits	RFL cPVC Pro
Raw material has a successful track record of over 50 years-across the globe	yes
Raw material has been used in the highest number of projects in Bangladesh over last 12 years	yes
Raw material is NSF certified	yes
Widest range of pipes and fittings from ½" to 6"	yes
Consistent lab testing in Europe, USA and Bangladesh	yes
Nationwide marketing and support team	yes
Factory warranty on all products	yes

THE SUPERIOR HOT/COLD WATER DISTRIBUTION SYSTEM

When you specify RFL cPVC Pro Pipe & Fittings, you benefit from the most experienced installation and support network in the industry. Let us help you specify the pipes, fittings, solvent cement and installation technologies that meet your most stringent for reliability and performance.



Parameters	RFL cPVC Pro Pipe & Fittings	Pipe processed from generic Cpvc materials	Remarks
Vicat softening	Pass	Fail	Generic cpvc product has continuous problem in hot water lines
Vice crush	Pass	Fail	In generic cpvc product, materials is inconsistent which weakens pipe and has high risk of pipe failure.
Malfunction failure at 95 deg c	Pass	Fail	Generic cpvc product has less life expectancy.
Manufacturing process	Pass	Fail	RFL cPVC Pro pipes have strong quality control and has no batch variation.
Specification and code acceptance	Pass	Fail	RFL cPVC Pro pipes is strong on technical grounds and is a well accepted brand.
Product consistency	Pass	Fail	RFL cPVC Pro pipe assures product uniformity.



DIFFERENCE BETWEEN RFL cPVC PRO PIPE & FITTINGS AND CONVENTIONAL PIPING SYSTEM

Property	RFL cPVC Pro Pipe & Fittings	GI	PP-R
Corrosion	No effect due to excellent chemical resistance	Corrodes faster and deteriorates	Has a certain amount chemical resistance
Scaling , pitting and leaching and full bore flow	Absence Scaling , pitting and leaching leads to full bore flow	Severe Scaling , pitting and leaching leads to reduced bore flow	Scaling , pitting and leaching can occur and reduce bore flow in some instances
Thermal conductivity and insulation levels	Lower thermal conductivity reduces heat loss and requires reduced insulation levels	Very high thermal conductivity increases heat loss and requires high insulation levels	Higher thermal conductivity than cPVC, leading to heat loss and requires higher insulation levels
Bacterial growth	Extremely low	More than copper	More than cPVC
Fire resistance	LOI of 60% and hence does not catch fire or sustain burning	Being metallic, better Fire Resistance	LOI is 80%, hence can easily catch fire and sustain burning
Installation	Easy, through cold welding, requiring less man hours. No electric / heat source require. Hence cost effective.	Very slow and cumbersome. Requires more man hours.	Joining process is by heat fusion. Requires greater skill and electric/heat source
Leakage	Leak free installation for the entire life span of the piping system	Always susceptible to leakage from day one of installation	Relatively leak free if highly skilled manpower is employed
Thermal expansion	Lower, leads to less pipe expansions, less looping and offsets	Although thermal expansion is lower, the stress induced is far greater	Higher expansion requires more looping/offsets
Range of fitting	Wide range of fittings makes layout easier and compact for Architects, Consultants, Builders and end users	Limited range of fittings	Normal range of fittings
Specials Tools	Simple cutter or saw blade and cPVC solvent cement is adequate for 100% leak-proof joint and satisfactory plumbing	Needs heavy tools for pipe cuttings and threading	Needs special electrical heater to achieve the desired hot welded joint. Any failure can result in poor plumbing and therefore leakages



RFL cPVC PRO SOLVENT CEMENT

All Weld-On solvent cements, primers and cleaners meet the requirements for Low VOC (volatile organic compound) emission limits established by the California South Coast Air Quality Management District (SCAQMD), one of the USA's strictest air quality regulatory bodies. Low VOC emissions contribute to cleaner air.

All Weld-On Low VOC solvent cements provide the following benefits:

- High Quality Performance with excellent installation properties.
- User Friendly. Reduced fumes and odour for the comfort and well being of pipe installers.
- Meet ASTM Standards for solvent cements used for plastic pipe installation.
- Environmentally Responsible. LEED® Compliant (Leadership in Energy and Environmental Design).

BUET Certification:

যন্ত্রকৌশল বিভাগ
বাংলাদেশ প্রকৌশল বিশ্ববিদ্যালয়
১৩৫১-১০০০, হাবড়াপাড়া

Department of Mechanical Engineering
Bangladesh University of Engineering and Technology
Dhaka-1000, Bangladesh

TEST REPORT OF CPVC PIPE

27 February 2022

CLIENT: MR. MD. JAHANGIR ALAM
EXECUTIVE DIRECTOR
RFL GROUP, PRAN-RFL CENTRE
105 MIDDLE BAGDA, DHAKA-1212

CLIENT'S REFERENCE: NR

UNIVERSITY REFERENCE: BRTC No. 1102-54153/ME/21-22

SAMPLES SUPPLIED: 3/4" dia CPVC Pipe 2 SDR-13.5, Brand: RFL

TEST CONDUCTED BY: DEPARTMENT OF MECHANICAL ENGINEERING
BUET, DHAKA-1000

TEST RESULTS

DIMENSION TEST
Standard Used: ASTM D-2846; SDR-13.5

Sample ID	Outside dia. (mm)		Wall thickness (mm)		Remarks
	Max.	Min.	Max.	Min.	
3/4" dia. CPVC Pipe 2 SDR-13.5	22.33	22.21	22.20	1.89	Both OD and wall thickness are OK.

IMPACT TEST
Standard Used: Height-1 MTR, Weight-500gm, Stroke -10

Sample ID	Observations	Remarks
3/4" dia. CPVC Pipe 2 SDR-13.5	No failure out of 10 strikes	Conforms to the requirement of the standard

SHORT-TERM HYDROSTATIC PRESSURE
Standard Used: ASTM D-2846; SDR-13.5

Sample ID	Test Temp. and Duration	Applied Pressure (bar)	Observations
3/4" dia. CPVC Pipe 2 SDR-13.5	20°C, 1 hr	22.5	No leakage was observed

Dr. Md. Zahurul Haq
Professor

Dr. Md. Ashiqueur Rahman
Professor

Professor and Head of Department
Mechanical Engg. Dept.
BUET, Dhaka-1000
Bangladesh

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যন্ত্রকৌশল বিভাগ
বাংলাদেশ প্রকৌশল বিশ্ববিদ্যালয়
১৩৫১-১০০০, হাবড়াপাড়া

Department of Mechanical Engineering
Bangladesh University of Engineering and Technology
Dhaka-1000, Bangladesh

TEST REPORT OF CPVC PIPE

27 February 2022

CLIENT: MR. MD. JAHANGIR ALAM
EXECUTIVE DIRECTOR
RFL GROUP, PRAN-RFL CENTRE
105 MIDDLE BAGDA, DHAKA-1212

CLIENT'S REFERENCE: NR

UNIVERSITY REFERENCE: BRTC No. 1102-54151/ME/21-22

SAMPLES SUPPLIED: 2" dia. CPVC Pipe 2 SDR-11, Brand: RFL

TEST CONDUCTED BY: DEPARTMENT OF MECHANICAL ENGINEERING
BUET, DHAKA-1000

TEST RESULTS

DIMENSION TEST
Standard Used: ASTM D-2846; SDR-11

Sample ID	Outside dia. (mm)		Wall thickness (mm)		Remarks
	Max.	Min.	Max.	Min.	
2" dia. CPVC Pipe 2 SDR-11	54.27	53.99	54.08	5.19	Both OD and wall thickness are OK.

IMPACT TEST
Standard Used: Height-1 MTR, Weight-500gm, Stroke -10

Sample ID	Observations	Remarks
2" dia. CPVC Pipe 2 SDR-11	No failure out of 10 strikes	Conforms to the requirement of the standard

SHORT-TERM HYDROSTATIC PRESSURE
Standard Used: ASTM D-2846; SDR-11

Sample ID	Test Temp. and Duration	Applied Pressure (bar)	Observations
2" dia. CPVC Pipe 2 SDR-11	20°C, 1 hr	28.1	No leakage was observed

Dr. Md. Zahurul Haq
Professor

Dr. Md. Ashiqueur Rahman
Professor

Professor and Head of Department
Mechanical Engg. Dept.
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Bangladesh

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ISO Certification:



Sustainable Management System Inc.

Certificate of Registration

This is to certify that the

MANAGEMENT SYSTEM

of

RFL Plastics Limited

for

Pran Industrial Park, Bagpara, Palash, Narshingdi-1610, Bangladesh

Manufacturing and Sales of PVC Pipe, uPVC Pipe, CPVC Pipe, Hose Pipe, Water Tank, HDPE & PP-R Pipe and Fittings

has been assessed and registered against the provision of

ISO 45001:2018

International Standard

Registration Number : 0382/2023

Certification Date : 03/06/2023

Re-Certification Due Date : 02/06/2023

Certificate Number : 202006032

Code : 14

Exclusions : N/A

Issue No : 14




Certification Approved By



President & CEO

This is an accredited certificate authorised for issue by Accreditation Service for Certifying Bodies LLC who have assessed Sustainable Management System Inc. against defined criteria and in cognizance of ISO 17021:2015 'Conformity Assessment - Requirements' when confirmed by the register listed in the international register of Quality Assessed Organisations: www.ircao.com.

This certificate is the property of Sustainable Management System Inc.
3705 Sullivan Street Woodside New York 11379 USA
The validity of this certificate can be checked at: www.ismcert.com/certificate-check.

inspect

Visual Theme and address

RFL Plastics Limited

HO: PRAN-RFL Center, 105 Middle Badda, GPO BOX# 83, Dhaka-1212, Bangladesh

Site 1: Pran Industrial Park, Bagpara, Palash, Narshingdi-1610, Bangladesh

Site 2: Mirzapara, Ruggani, Narayanganj-1464, Bangladesh

Site 3: Saughtat, Vata, Ruggani, Narayanganj-1462, Bangladesh

ISO 14001:2015 Environmental Management System

inspect assessed and approved that related firm meets the requirements of the designated standard at related scope

Manufacturing, Sales & Marketing of Wooden, Laminated Board & Metal Furniture Chair, Side, High Bench with Long Backboard, Low Bench Plastic/Co polymer Plastic Furniture, uPVC, PPR, CPVC, HDPE Pipe & Fittings, Hose Pipes and Water Tanks.

IRCAO Category Code: 14-23

Initial issue date: 01 Apr 2024

Issue date of this certificate: 01 Apr 2024

Validity of this certificate: 31 Mar 2027

Re-certification date: 31 Mar 2027

Contract No: 22.05.334-EN

IRAP257 is accredited by International Accreditation Service (IAS) United States (IP America)

To verify the validity of this certificate please visit: www.inspect.com

The validity of this certificate is depend on the location of surveillance assignments




inspect International Certification and Inspection Co. Ltd.

inspect

Visual Theme and address

RFL Plastics Limited

HO: PRAN-RFL Center, 105 Middle Badda, GPO BOX# 83, Dhaka-1212, Bangladesh

Site 1: Pran Industrial Park, Bagpara, Palash, Narshingdi-1610, Bangladesh

Site 2: Mirzapara, Ruggani, Narayanganj-1464, Bangladesh

Site 3: Saughtat, Vata, Ruggani, Narayanganj-1462, Bangladesh

ISO 9001:2015 Quality Management System

inspect assessed and approved that related firm meets the requirements of the designated standard at related scope

Manufacturing, Sales & Marketing of uPVC, PPR, CPVC, HDPE Pipe & Fittings, Hose Pipes, Water Tanks, Wooden and Laminated Board Furniture & Metal Furniture.

IRCAO Category Code: 14-23

Initial issue date: 07 Nov 2019

Issue date of this certificate: 01 Nov 2022

Validity of this certificate: 31 Oct 2025

Re-certification date: 31 Oct 2025

Contract No: 22.05.334-QM

IRAP257 is accredited by International Accreditation Service (IAS) United States (IP America)

To verify the validity of this certificate please visit: www.inspect.com

The validity of this certificate is depend on the location of surveillance assignments




inspect International Certification and Inspection Co. Ltd.

Quality Assurance Facility



Digital Weight Balance
with Density Kit



Moisture Content Tester



Hydrostatic Pressure Test



MFI Test



Impact Test



Vicat Softening Point
Apparatus



Heat Reversion Test

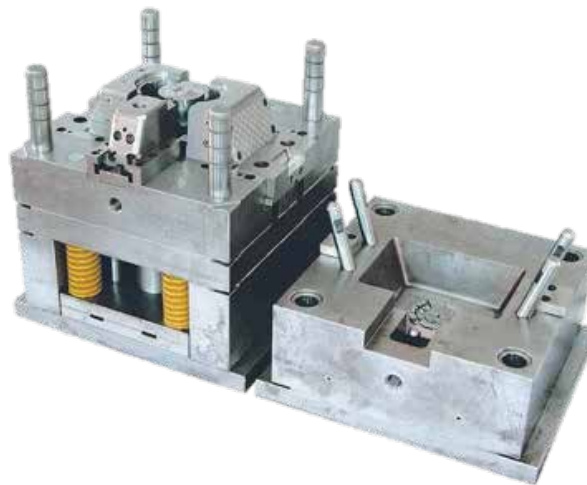


Sulphated Ash Test



Digital Opacity Tester

RFL possesses its own mould manufacturing facility and troubleshooting capabilities



RFL cPVC Pro are the proud partners in transforming Bangladesh



Dhaka Airport Terminal-3



Dhaka Elevated Expressway



Dhaka Metro Rail



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cPVC Pro

PIPE & FITTINGS

HOT & COLD **WATER** Plumbing Solution

can withstand

93°C
temperature



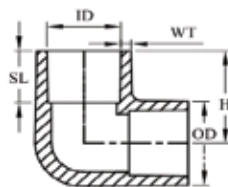
পাইপের বস
না কিনলে লস!



RFL cPVC Pro Pipe

RFL CPVC Pro pipe is a Hot and cold potable water distribution system made of chlorinated polyvinyl chloride (cPVC). This is flexible than uPVC pipe and withstand upto 93 degree to 00.0 degree Celsius.

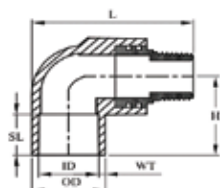
Code	Diameter (mm)	Thickness (mm)	Length (Mtr)	SDR Or Schedule	Standard
70305	1/2"(15mm)	1.40 - 1.90	3	13.5	ASTM D-2846
70306	3/4"(20mm)	1.70 - 2.20	3	13.5	ASTM D-2846
70307	1"(25mm)	2.10 - 2.60	3	13.5	ASTM D-2846
70308	1.25"(32mm)	2.60 - 3.10	3	13.5	ASTM D-2846
70309	1.5"(40mm)	3.10 - 3.60	3	13.5	ASTM D-2846
70310	2"(50mm)	4.00 - 4.60	3	13.5	ASTM D-2846
70311	1/2"(15mm)	1.70 - 2.20	3	11	ASTM D-2846
70312	3/4"(20mm)	2.00 - 2.50	3	11	ASTM D-2846
70313	1"(25mm)	2.60 - 3.10	3	11	ASTM D-2846
70314	1.25"(32mm)	3.20 - 3.70	3	11	ASTM D-2846
70315	1.5"(40mm)	3.80 - 4.30	3	11	ASTM D-2846
70316	2"(50mm)	4.90 - 5.50	3	11	ASTM D-2846
706169	2.5" (65mm)	5.16-5.77	3	SCH-40	ASTM F-441
706191	3" (80mm)	5.49-6.15	3	SCH-40	ASTM F-441
706192	4" (100mm)	6.02-6.73	3	SCH-40	ASTM F-441



RFL cPVC Elbow 90°

For joining pipe line & water flow 90 degree.

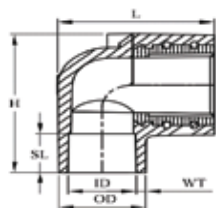
Code	Size	ID	OD	SL	H	WT
70368	1/2"	16.08	21.50	13.10	23.30	2.59
70369	3/4"	22.20	27.60	18.00	31.40	2.65
70370	1"	28.60	34.50	23.10	40.70	2.59
70371	1.25"	34.90	41.50	28.10	48.90	3.18
70372	1.5"	41.30	49.60	33.50	56.00	3.76
70373	2"	54.00	64.70	43.50	72.30	4.9
706269	2.5"	73.44	84.10	45.00	85.10	5.40
706318	3" (sch-40)	89.05	101.87	47.68	85.27	5.55
706319	4" (sch-80)	114.22	126.38	58.63	113.6	9.5
705080	6" (sch-80)	168.1	182.32	77.8	250	12.5



RFL cPVC Brass MPT 90° Elbow

Creates a 90-degree change in direction for cPVC pipes.

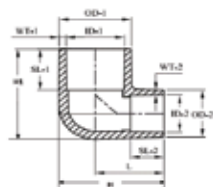
Code	Size	ID	OD	SL	H	L	WT
706351	3/4"X1/2"	22.45	27.63	17.78	34.3	60.3	2.59



RFL cPVC Brass FPT 90° Elbow

For joining pipe line & water flow 90 degree with metal brass facility.

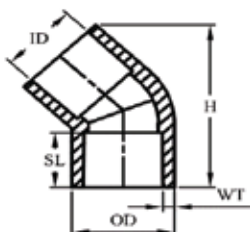
Code	Size	ID	OD	SL	L	H	WT
70499	3/4"X1/2"	22.20	27.50	33.90	18.00	51.70	29.80
70577	3/4"X3/4"	22.20	27.50	40.10	18.00	55.10	33.00
70578	1"	28.95	35.02	15.70	58.45	56.40	3.18
70579	1"X1/2"	28.60	34.50	34.10	23.00	56.70	32.30
70580	1.25"	35.08	42.3	28.58	65.25	78.75	3.58
70379	1/2"	16.08	21.90	33.50	13.00	46.06	27.10
706348	1"X3/4"	28.6	35.21	39.56	23.37	55.15	3.5



RFL cPVC Reducer Elbow 90°

For joining pipe line & water flow 90 degree by reducing.

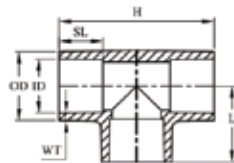
Code	Size	ID1	ID2	OD1	OD2	SL1	SL2	H	H1	WT1	WT2
70374	3/4"X1/2"	22.20	16.08	27.50	21.90	18.70	13.30	40.70	38.80	2.59	2.59
70375	1"X3/4"	28.90	22.40	34.50	27.50	23.40	18.70	51.50	57.00	2.59	2.59
70376	1.25"X1/2"	35.10	16.08	42.10	21.90	29.10	13.30	68.30	68.50	3.5	2.59
70377	1.25"X1"	35.10	28.80	43.20	34.90	26.25	20.65	64.10	61.35	4.05	3.12
70378	2"X1"	54.44	28.90	64.75	28.98	43.55	23.30	85.05	104.25	5.20	3.00
706184	1"X1/2"	28.90	22.40	34.50	21.90	23.40	13.30	45.20	49.50	2.59	2.59



RFL cPVC Elbow 45°

Using to change the water flow to 45 degree.

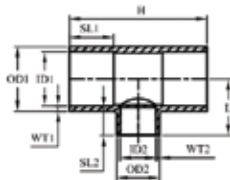
Code	Size	ID	OD	SL	L	WT
70581	1/2"	16.08	21.90	13.30	33	2.59
70582	3/4"	22.20	28.20	18.70	44	2.59
70445	1"	28.60	35.00	23.40	56	2.59
70446	1.25"	34.9	42	28.38	69.5	3.18
70447	1.5"	41.28	49.41	32.99	80	3.76
70448	2"	53.88	64.13	43.65	105	4.9
706270	2.5" SCHD 40	72.8	84.26	54.03	168	5.15
706320	3" SCHD 40	89.05	102.32	59.13	188	5.49
706321	4" SCHD 80	114.52	127.6	57.97	235	9.5



RFL cPVC Tee

For joining pipe line & water flow 180 degree & branch line 90 degree.

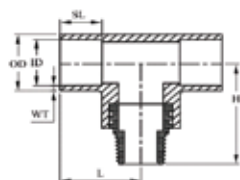
Code	Size	ID	OD	SL	H	L	WT
70361	1/2"	16.08	21.50	13.10	43.80	21.90	2.59
70362	3/4"	22.20	27.60	18.00	62.30	31.15	2.59
70364	1"	28.60	34.50	23.10	80.40	40.20	2.59
70365	1.25"	34.90	41.50	28.10	95.40	47.70	3.18
70366	1.5"	41.30	49.60	33.50	112.10	56.05	3.76
70367	2"	54.00	64.70	43.50	145.00	72.50	4.9
706176	2.5"	72.8	84.26	54.03	165.5	82	5.15
706193	3" (sch-40)	89.05	102.32	59.13	193.96	96.52	5.65
706194	4" (sch-80)	114.22	126.38	58.63	245	188	9.5
705082	6" (sch-80)	168.1	182.32	77.8	350	77.8	12.4



RFL cPVC Reducing Tee

For joining pipe line & water flow 180 degree & branch line 90 degree.

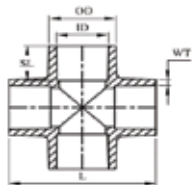
Code	Size	ID1	ID2	OD1	OD2	H	SL1	SL2	L	WT1	WT2
70493	3/4"X1/2"	22.20	16.08	27.50	21.05	55.10	18.70	13.30	25.50	2.59	2.59
70346	1"X1/2"	28.60	16.08	34.50	21.05	71.20	23.40	13.30	29.00	2.59	2.59
70347	1"X3/4"	28.60	22.20	34.50	27.50	71.50	23.40	18.70	34.20	2.59	2.59
70491	1.25"X1/2"	35.01	16.08	42.58	21.05	94.5	28.45	13.30	37.2	4.15	3.10
70348	1.25"X3/4"	35.01	22.1	42.58	27.3	84.84	28.45	18.51	38.7	4.15	3.10
70349	1.25"X1"	34.93	28.42	42.67	34.5	94.23	28.09	23.35	42.7	4.15	3.10
70350	1.5"X1/2"	41.30	16.08	50.70	21.05	98.2	33.50	13.30	38.3	3.76	2.59
70351	1.5"X3/4"	41.30	22.20	50.70	27.70	100.60	33.50	18.70	105.70	4.75	4.12
70352	1.5"X1"	41.30	28.60	50.70	34.50	105.50	33.50	23.40	105.70	4.75	4.12
70492	1.5"X1.25"	41.70	35.22	50.75	43.35	105.70	33.95	28.47	105.70	4.75	4.12
70494	2"X1/2"	54.22	15.65	64.7	20.77	106.5	43.58	13.78	45.6	5.35	4.15
70353	2"X3/4"	54.17	21.9	63.6	27.39	134.03	43.14	18.11	48.4	5.35	4.15
70355	2"X1"	54.10	28.60	64.70	34.50	133.60	43.50	23.40	51.10	5.35	4.15
70354	2"X1.25"	54.10	34.8	64.2	42.02	134.17	43.37	28.31	56.9	5.35	4.15
70356	2"X1.5"	54.1	41.4	64.8	50.8	133	43.7	33.7	61.38	5.35	4.15
705083	100X150MM SCH80	114.76	168.83	131.88	190.77		57.15	76.2		8.56	10.97
705084	150X100MM SCH80	168.83	114.76	190.77	131.88		76.2	57.15		10.97	8.56



RFL cPVC Brass MPT Tee

For joining pipe line to 180 degree with branch line to 90 degree with brass facility.

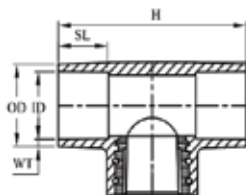
Code	Size	ID	OD	SL	H	L	WT
706352	3/4"X1/2"	22.45	27.63	17.78	49.2	34.1	2.59



RFL cPVC Cross Tee

For joining pipe line to 180 degree & straight with branch line.

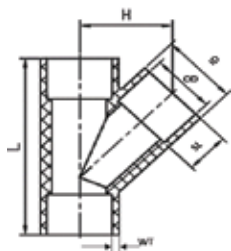
Code	Size	ID	OD	SL	L	WT
70497	1/2"	16.08	21.90	13.30	18.5	2.59
70498	3/4"	22.20	28.20	18.70	25.8	2.59
706353	1"	28.60	35.00	23.40	32.5	2.59



RFL cPVC Brass FPT Tee

For joining pipe line to 180 degree with branch line to 90 degree with brass facility.

Code	Size	ID	OD	H	WT	SL
70357	1/2"	16.08	21.90	51.60	2.59	13.00
70495	3/4"	22.20	27.50	61.90	2.59	18.00
706349	1"	29.00	35.15	78.20	3.15	16.45
70360	1.25"	35	42.41	94.5	3.18	28.53
70358	3/4"X 1/2"	22.20	27.50	67.90	2.59	18.00
70359	1"X 1/2"	28.60	34.50	78.10	2.59	23.00
706278	1"X1"X3/4"	28.63	34.88	77.8	3.06	18.36
70496	1.25"X1/2"	34.90	41.50	95.40	3.18	28.53



RFL cPVC Y Tee

For joining pipe line to 45 degree.

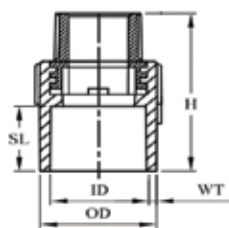
Code	Size	ID	OD	SL	L	H	WT
705085	4" (SCH-80)	114.52	127.6	57.97			9.5
705086	6" (SCH-80)	168.1	182.32	77.8			12.5



RFL cPVC End Plug

Using to close water flow.

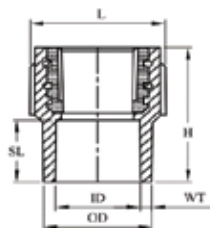
Code	Size	L	H
706182	1/2"	29.6	75.2
706183	3/4"	35.25	76.3



RFL cPVC Male Thread Brass Adapter

For joining pipe line with one sided male brass facility.

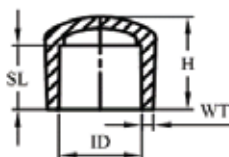
Code	Size	ID	OD	SL	H	WT
70398	1/2"	16.08	21.90	13.00	42.10	2.59
70399	3/4"	22.20	28.80	18.00	49.40	2.59
70434	1"	28.60	35.00	23.00	55.80	2.59
70435	1.25"	35.05	42.16	27.62	80.4	3.18
70436	1.5"	41.35	49.63	33.46	87.4	3.76
70437	2"	54.25	64.43	43.56	102.5	4.9



RFL cPVC Female Brass Adapter

For joining pipe line with one sided brass facility.

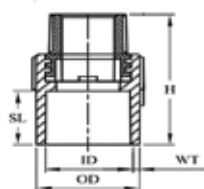
Code	Size	ID	OD	L	SL	H	WT
70585	1/2"	16.08	21.90	34.00	13.30	33.20	2.59
70586	3/4"	22.45	28.60	40.00	18.70	39.70	2.59
70587	1"	28.83	35.00	46.40	23.40	47.30	2.59
70588	1.25"	35.05	42.16	50.75	27.62	78.1	3.18
70613	1.5"	41.35	49.63	56.9	33.46	84.56	3.76
70589	2"	54.25	64.43	59.4	43.56	93.6	4.9



RFL cPVC End Cap

Using at the end of the pipe line to close water flow.

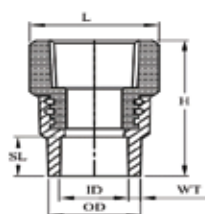
Code	Size	ID	OD	SL	H	WT
70438	1/2"	16.08	21.90	13.30	19.20	2.59
70439	3/4"	22.20	28.20	18.70	25.80	2.59
70440	1"	28.60	35.00	23.40	31.50	2.59
70441	1.25"	34.9	42	28.38	39.45	4.20
70442	1.5"	41.28	49.41	32.99	42.9	3.76
70443	2"	53.88	64.13	43.65	54.9	5.33
706327	2.5" (sch-40)	73.55	84.15	44.50	58.25	5.5
706328	3" (sch-40)	89.50	100.45	48.29	62.5	6.00
706329	4" (sch-80)	114.52	127.6	57.97	80.7	9.5
705530	6" (sch-40)	168.1	182.32	77.8	105	12.5



RFL cPVC Male Brass Reducer

For taking branch line from GI line.

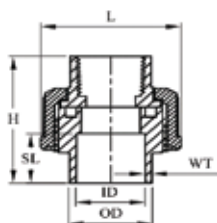
Code	Size	ID	OD	SL	H	WT
70591	3/4"X1/2"	22.20	28.80	18.00	47.70	2.59
706279	1"X1/2"	28.83	35.00	23.40	60.5	2.59
706350	1"X3/4"	28.83	35.00	23.40	55.1	3.08



RFL cPVC Female Brass Reducer

For taking branch line from GI line.

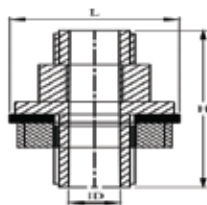
Code	Size	ID	OD	SL	H	L	WT
706275	3/4"X1/2"	22.20	28.80	18.00	38.8	33.10	2.59
706276	1"X1/2"	28.83	35.00	23.40	44.2	37	2.59
706277	1"X3/4"	28.90	35.05	24.60	45.78	39.30	3.20



RFL cPVC Union

For joining pipe to flow water 180 degree but easy to install & disassemble.

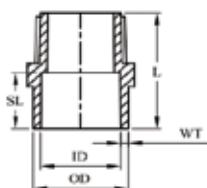
Code	Size	ID	OD	L	SL	H	WT
70386	1/2"	16.08	22.00	39.00	13.10	37.00	2.59
70387	3/4"	22.20	27.80	44.30	18.00	46.60	2.59
70388	1"	28.60	43.30	50.30	23.10	56.80	2.59
70389	1.25"	34.90	41.90	59.10	28.10	71.00	3.18
70390	1.5"	41.30	52.70	71.40	33.50	85.50	3.76
70391	2"	54.00	65.30	84.70	43.50	101.10	4.9
706359	2.5"	73.23	88.65	125.25	46.14	101.75	5.15
706360	3" (sch-40)	88.75	105.41	146.3	48.6	108.82	5.49
706361	4" (sch-80)	114.57	133.7	176.09	58.08	127.1	9.5



RFL cPVC Tank Adapter

Using in water tank body to join pipe.

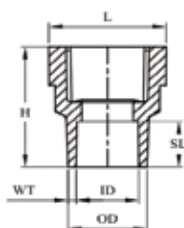
Code	Size	ID	L	H
706332	1/2"	16.08	40.9	68
706333	3/4"	22.45	45.6	75
706334	1"	28.83	56.3	86
706335	1.25"	35.2	65	94
706336	1.5"	41.66	71	102
706337	2"	54.38	82	103.3



RFL cPVC Male Thread Adapter

Using to join pipe line one side threaded another side push.

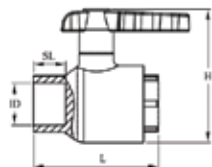
Code	Size	ID	OD	SL	L	WT
70449	1/2"	16.08	21.90	13.30	32.00	2.59
70450	3/4"	22.20	27.50	18.70	42.30	2.59
70458	1"	28.60	34.50	23.40	47.30	2.59
70459	1.25"	35	42.41	28.53	55.90	3.18
706180	1.5"	41.55	50.95	33.6	63.02	3.76
706181	2"	54.25	64.43	43.56	74.70	5.45
706338	2.5" SCHD 80	73.14	87.48	45.6	82.22	3.98
706339	3" SCHD 80	89.09	104.11	48.26	87.29	7.62
706340	4" SCHD 80	114.4	131.5	57.32	102.70	9.5



RFL cPVC Female Thread Adapter

Using to join pipe line one side threaded another side push.

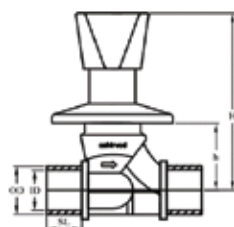
Code	Size	ID	OD	SL	L	H	WT
706185	1/2"	16.02	21.02	13.40	26.58	33.70	2.50
706186	3/4"	22.20	27.50	18.70	42	32.4	2.59
706187	1"	28.88	34.90	26.10	39.70	48.65	3.10
706188	1.25"	50.90	35.10	28.10	50.55	61.55	4.10
706189	1.5"	41.65	50.65	33.75	58.95	67.10	4.65
706190	2"	54.48	64.85	43.70	70.15	75.50	5.32
706341	2.5" SCHD 80	73.14	87.48	45.6	87.5	77.5	7.01
706342	3" SCHD 80	89.09	104.11	48.26	104	87	7.62
706343	4" SCHD 80	114.4	131.5	57.32	128	105	9.5



RFL cPVC Ball Valve

To control pressure of water flow rate in pipe line.

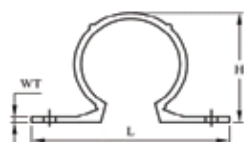
Code	Size	ID	SL	L	H
70380	1/2"	16.08	12.7	60.4	63.5
70381	3/4"	22.45	17.78	78.3	75.1
70382	1"	28.83	22.86	98.6	93.3
70383	1.25"	35.2	27.94	114	108.4
70384	1.5"	41.66	33.02	125	129
70385	2"	54.38	43.18	161	160
706322	2.5" (sch-40)	72.8	54.03	296.74	5.15
706323	3" (sch-40)	89.05	59.13	432.48	5.49
706324	4" (sch-40)	114.52	127	568.22	9.5



RFL cPVC Concealed Valve

For controlling water flow of shower.

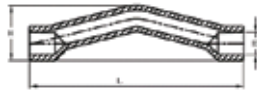
Code	Size	ID	OD	SL	H	L
706273	1/2"	16.08	21.26	12.7	109	41.3
706274	3/4"	22.45	27.63	17.78	109	41.3
708659	1"	28.83	42.8	22.8	105	41.3



RFL cPVC Clamp

Using to hold the pipe line.

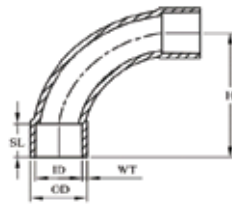
Code	Size	L	H	WT
70392	1/2"	40	23.46	2.2
70393	3/4"	62.5	30.5	2.4
70394	1"	71	38.4	2.6
70395	1.25"	79.5	46.75	2.8
70396	1.5"	87	54.14	3
70397	2"	100.5	68.5	3



RFL cPVC Step Over Bend

Using to join pipe over any obstacle.

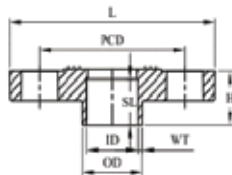
Code	Size	ID	H	L
70583	1/2"	16.08	37.6	186.1
70584	3/4"	22.02	50.6	229.2
706354	1"	28.06	64.1	295.8
706355	1.25"	34.09	78.2	367.2
706356	1.5"	41.28	85	360
706357	2"	53.88	110	500



RFL cPVC Long Radius Bend

Using to flow water flow 90 degree.

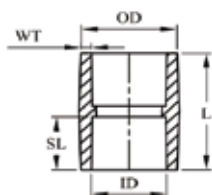
Code	Size	ID	OD	SL	H	WT
706177	1/2"	16.08	21.90	13.30	64.1	2.59
706178	3/4"	22.20	28.20	18.70	67.3	2.59
706179	1"	28.60	35.00	23.40	102	2.59
706261	1.25"	34.9	42	28.38	103.1	3.18
706262	1.5"	41.28	49.41	32.99	109.9	3.76
706263	2"	53.88	64.13	43.65	125.5	4.9



RFL cPVC Flange

Used where reliable and durable pipe connections are required.

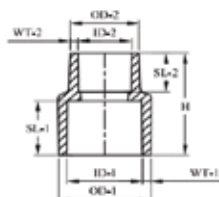
Code	Size	ID	OD	SL	H	H	H	WT
706344	2.5"	73.38	83.68	44.45	50.7	176	134	5.15
706345	3"	89.31	100.29	47.63	55.3	188	148	5.49
706346	4"	114.76	126.8	57.15	68	225	189	6.03



RFL cPVC Coupling

For joining pipe line & water flow 180 degree.

Code	Size	ID	OD	SL	L	WT
70320	1/2"	16.08	21.50	13.10	28.90	2.59
70321	3/4"	22.20	27.60	18.00	39.70	2.59
70322	1"	28.60	34.50	23.10	50.20	2.59
70323	1.25"	34.90	41.50	28.10	60.00	3.18
70324	1.5"	41.30	49.60	33.50	70.40	3.76
70325	2"	73.40	84.25	45.25	94.15	5.65
706174	2.5"	73.38	83.68	44.45	96.5	5.15
706325	3" (sch-40)	89.55	100.83	49.1	102.57	5.49
706326	4" (sch-80)	114.4	126.5	58.13	121.34	9.5
705531	6" (sch-80)	168.1	182.32	77.8	160	12.5



RFL cPVC Reducing Coupling

For joining pipe line & water flow 180 degree by reducing.

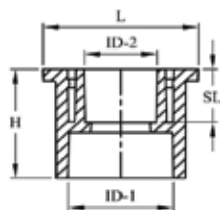
Code	Size	ID1	ID2	OD1	OD2	SL1	SL2	H	WT1	WT2
70326	3/4" X 1/2"	22.90	16.08	27.50	21.90	18.70	13.30	33.90	2.59	2.59
70327	1" X 1/2"	28.6	14.34	35.06	21.37	23.49	13.27	39.07	2.59	2.59
70328	1" X 3/4"	34.43	22.90	34.50	27.50	23.40	18.70	44.30	2.59	2.59
70329	1.25" X 1/2"	35.2	16.08	41.56	21.26	27.94	12.7	51.5	4.14	3.10
70330	1.25" X 3/4"	35.10	22.40	43.30	27.67	28.55	18.25	48.55	4.14	3.10
70477	1.25" X 1"	35.18	29.00	43.25	35.05	30.15	23.30	54.32	4.14	3.10
706172	1.5" X 1/2"	41.66	16.08	49.18	21.26	33.02	12.7	50.0	4.60	2.59
70331	1.5" X 3/4"	41.60	22.45	50.75	27.66	33.35	18.73	56.80	4.58	2.50
70332	1.5" X 1"	41.4	28.49	49.42	34.44	33.46	23.22	63.3	4.60	23.25
70333	1.5" X 1.25"	41.3	34.9	49.44	42.74	33.15	29.31	67.68	4.60	4.05
70478	2" X 1/2"	54.38	16.08	64.18	21.26	43.18	12.7	62.0	4.90	2.59
706173	2" X 3/4"	54.38	22.45	64.18	27.63	43.18	17.78	71.5	4.90	2.59
70334	2" X 1"	54.52	28.92	64.94	35.00	49.3	21.15	71.65	5.25	3.05
70336	2" X 1.25"	54.1	34.9	63.9	41.82	46.27	28.4	76.8	4.90	3.18
70335	2" X 1.5"	54.15	41.36	63.9	49.3	46.28	36.7	82.3	4.90	3.76



RFL cPVC Cutter

Used for precise cutting of pipes.

Code	Item Name
70590	cPVC Cutter (1/2-1")



RFL cPVC Reducer Bushing

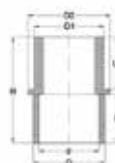
For joining pipe line & by reducing.

Code	Size	ID1	ID2	SL	L	H
70481	3/4"X1/2"	22.45	16.08	12.70	22.45	18.00
70482	1"X1/2"	28.83	16.08	12.70	34.00	26.35
70337	1"X3/4"	28.83	22.45	17.78	34.00	26.35
70483	1.25"X1/2"	35.20	16.08	12.70	41.5	31.10
70338	1.25"X3/4"	35.20	22.45	17.78	41.5	31.10
70339	1.25"X1"	28.70	28.40	23.55	40.25	30.60
70340	1.5"X1/2"	41.66	16.08	12.70	49.3	36.30
70341	1.5"X3/4"	41.66	22.45	17.78	49.3	36.30
70342	1.5"X1"	41.66	28.83	22.86	49.3	36.30
70343	1.5"X1.25"	33.00	41.20	28.75	48.7	36.55
70344	2"X1"	28.80	43.72	20.75	64.05	46.10
70484	2"X1.25"	41.68	45.02	28.50	64.05	45.75
706264	2.5"X2"	54.46	49	43.95	79.94	52.56
706265	2.5"X1.5"	41.66	49	33.45	64.05	45.75
706266	2"X1/2"	54.38	16.08	12.70	64.0	45.00
706267	2"X3/4"	54.38	22.45	17.78	17.78	45.00
70345	2"X1.5"	41.75	45.10	33.45	64.05	45.75
706195	2.5"x1.25" (sch-40)	41.68	49	28.50	64.05	45.75
706196	3"x1.5" (sch-40)	41.4	76.9	33.1	98.6	55.4
706197	3"x2" (sch-40)	54.40	51.30	43.50	98.50	55.65
706198	3"x2.5" (sch-40)	73.2	51.30	45.1	98.50	58.4
706199	4"x2" (sch-40)	60.2	102.8	36.6	118.3	64.7
706200	4"x2.5" (sch-40)	73.2	106.9	45.1	117.8	65.5
706315	4"x3" (sch-40)	89.31	106.9	47.63	121.6	65.5
	6"x4" (sch-80)	114.5	145.7	57.9	177.3	84.6



RFL cPVC Transition Bushing

Facilitates a transition between pipes of different materials or sizes.



Code	Size
70485	1/2"
70486	3/4"
70487	1"
70488	1.25"
70489	1.5"
70490	2"
706268	2.5"X2" CTS
706316	3 IPS X2CTS
706317	4 IPS X 2 CTS



RFL Solvent Cement

Pipes and fittings make a smooth and permanent connection.

Code	Item Name
987507	cPVC Pro Solvent Cement 100ml
987508	cPVC Pro Solvent Cement 200ml
987509	cPVC Pro Solvent Cement 500ml



Laceration

In order to make a proper and neat joint, measure the pipe length accurately and make a small mark. Ensure that the pipe and fittings are size compatible. You can easily cut with a wheel type plastic pipe cutter or hacksaw blade. Cutting tubing as squarely as possible provides optimal bonding area within a joint.



Deburring/beveling

Burrs and fillings can prevent proper contact between tube and fitting during assembly and should be removed from the outside and inside of the pipe. Debarking tool, pocket knife or file are suitable for this. A slight bevel on the end of the tubing will ease entry of the tubing into the fitting socket.



Fitting Preparation

Using a clean, dry rag, wipe dirt and moisture from the fitting sockets and tubing end. The tubing should make contact with the socket wall 1/3 to 2/3 of the way into the fitting socket.



Solvent Cement Application

Use only cPVC cement or an all - purpose cement conforming to ASTM F 493 or joint failure may result. When making a joint, apply a heavy, even coat of cement to the pipe end. Use the same applicator without additional cement to apply a thin coat inside the fitting socket. Too much cement can cause clogged water ways.



Assembly

Immediately insert the tubing into the fitting socket, rotate the tube 1/4 to 1/2 turn while inserting. This motion ensures an even distribution of cement within the joint. Properly align the fittings. Hold the assembly for approximately 10 seconds, allowing the joint to set-up.



Set And Cure

Solvent cement set and cure times are a function of pipe size, temperature and relative humidity. Curing time is shorter for drier environments, smaller sizes and higher temperatures. It requires 10 to 20 minutes for perfect joint.



BENEFITS OF RFL cPVC PRO PIPE & FITTINGS



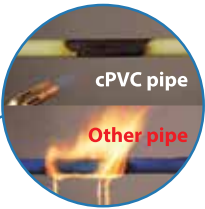
Hot water suitable

RFL cPVC Pro pipe is compatible with both hot and cold water. It withstands very high temperature compared to any other thermoplastic plumbing systems. Many solar and electric water heaters have cPVC piping systems for heat efficiency and lower installation cost.



Solid, Starchy material

RFL cPVC Pro pipe has a much higher strength than other thermoplastics used in plumbing. This means that cPVC needs less hangers and supports and there is no unsightly looping of the pipe. RFL cPVC Pro pipe has a higher pressure bearing capability. This leads to the same flow rate with a smaller pipe size.



Fire safety

cPVC has a limiting Oxygen Index (LOI) of 60. Thus in air, RFL cPVC Pro pipe does not support combustion. No flaming drips, does not increase the fire load, low flame spread, low smoke generation.



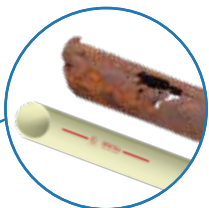
Easy Plumbing process

cPVC uses a simple, solvent cement jointing method. Tools required are very simple and inexpensive (chamfering tool and pipe cutter only) and avoid the need for an electrical source. Superior insulation : RFL cPVC Pro pipe is more energy efficient than metal pipe. As an insulator it does not lose heat the way metal pipe does. Heat loss and thermal expansion are reduced.



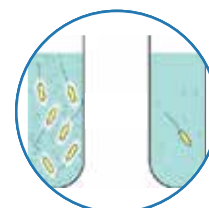
Sanctional world wide

cPVC plumbing system is approved for contact with potable water in a wide range of countries including USA, UK, Canada, Germany, France, The Netherlands, Middle East among others. Here in Bangladesh.



Deterioration resistance

RFL cPVC Pro Pipe gives excellent resistance even under the harshest of water conditions so there are none of the purity worries from corrosion of metal pipe or soldered joints. RFL cPVC Pro Pipe keeps pure water pure.



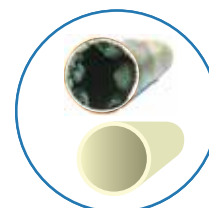
Less bacterial growth

Bacteria build up with cPVC is far lower than with alternative piping materials - Copper, Steel and other thermoplastics.



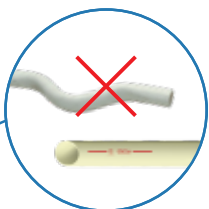
No Scale, ditch or leach formation

Even after years of use in the most aggressive conditions, RFL cPVC Pro pipe won't corrode, standing up to low pH water, coastal salt air exposures and corrosive soils. RFL cPVC Pro Pipe stays as solid and reliable as the day it was installed. It maintains full water carrying capacity because its scale resistance means no build up to cause water pressure loss.



Unaffected by chlorine in the water

Some materials may be adversely affected by chlorine contained in the water supply, which can cause breakdown of the polymer chains and potential leaks. In this respect, RFL cPVC Pro pipe is unaffected by the chlorine present in potable water supply.



Low fervid expansion

RFL cPVC Pro pipe has a lower coefficient of thermal expansion than alternative plastics, reducing the amount that the pipe expands when hot water is running, again reducing unsightly 'looping' of the pipe.



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cPVC Pro

PIPE & FITTINGS
Plumbing Piping Solution



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PRAN-RFL Center
105 Pragati Sarani, Middle Badda
Dhaka 1212, Bangladesh



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0800 7777 777

