

PIPE & FITTINGS SOLUTION

Your Proud Construction Partner from Bangladesh



ABOUT US

RFL started its journey with Cast Iron (CI) products in 1980. The company was founded by Late Maj Gen Amjad Khan Chowdhury (rtd) whose main objective was to ensure pure water and affordable irrigation instruments for improving rural life. With the passage of time RFL expands its business in many other areas and now is one of the leading companies of Bangladesh in PVC Pipe, Metal Pipe, Door, Water Tank, Pump, Motor, Electronics Home Appliance, Fan, Light, Plastic Household, Melamine, Stationery, Bicycle, Furniture, Medical Equipment etc businesses. After meeting the demand of Bangladesh RFL also starts exporting to different countries of the world. RFL is very much hopeful to bear the flag of Bangladesh across the world with pride.

RFL has become a benchmark for competitors on the lines of quality by manufacturing premium quality products to give clients excellent services and true value for money. The unmatched products have given a big name in the domestic market. This is possible because the company is professionally managed and promoted by people who ensure creativity.

RFL PLASTICS LIMITED

In 1996 RFL started PVC pipe business in its factory in Palash, Narsingdi with a commitment to manufacture world class pipe products by complying with international standard. At present the pipe factory is situated in 2 places, one is in Narsingdi and another one is in Habigonj. Total factory area 600,000 sft where every year 12,000 MT raw material is consumed. Around 3000 employees are working in its pvc and other pipe factories. It has around 115 extruder machines and 300 injection molding machines for producing world class pipe & fittings. To satisfy local & global demand RFL is increasing its production capacity on regular basis.

RFL is equipped with in-house R & D facilities to design and develop new products. A well organized testing laboratory is used to ensure quality products. RFL has been awarded with BSTI certificate and ISO 9001: 2015 Certificate for its strict compliance with the standard set by both the organizations.

RFL believes it can serve the growing demand of current urbanization of Bangladesh and be the proud construction partner of rising Bangladesh.

OUR FACTORY





OUR CORPORATE STRENTGH



PLANNING



INTENSIVE WORK



COMMITTMENT TO SERVE



TEAM WORK



OWN POWER PLANT



STRONG MIS SUPPORT

OUR COMPLIANCE

RFL is one of most labor friendly companies in Bangladesh. We believe that our workers are the valuable assets of our company and we are always trying hard to provide them better facilities. We have a dedicated compliance team who work on the compliance issues and continuously suggesting us new ways of development.

We provide below facilities for the staffs of our factory:

- Transport Facility by Bus & Trawler
 - Dormitory For Employee
 - Subsidy Food Facility
 - Medical Center
 - Day Care Center
 - · Prayer Room
 - Rest Room for Truck Drivers
 - TV Room
- · Special Incentive for Recycle Unit Workers
- · Everyday Fruits & Drinking Saline for Wworkers





CSR ACTIVITY

RFL always believes a business enterprise is not any isolated body rather it is a very important element of the society. And for this it has some specific duties to perform to the society. That's why RFL is involved in many CSR activities. Some of the those are listed below:

- Traffic Control By RFL Personnel
- PRAN-RFL School
- Financial Help & Teacher Support to Ghorashal Pilot School.
- River Side Gardening & Tree Plantation
- Bagpara Road Construction, Ghorashal, Palash



GO GREEN

We are very much conscious on our lovely nature. That's why we protect our environment through "GO GREEN" policy which intends us to produce environment friendly products.

- EFFLUENT TREATMENT PLANT (ETP)
- RECYCLE PLANT
- PLANTATION



OUR CREDENTIALS

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





Late CEO of PRAN-RFL Group Receiving the Trophy from former Commerce Minister of Pepoles Republic of Bangladesh

BEST EXPORTER TROPHY



DMD of Pran-RFL Group receiving the Award from Honorable Prime Minister of Pepoles Republic of Bangladesh

DIFFERENT AUDITS WHICH WE PASSED

Bangladesh Standards & Testing Institution

Bangladesh University of Engineering and Technology

Bureau of Indian standards

Central Institute of Plastics Engineering and Technology





WE ARE WORKING WITH

Dhaka Water Supply & Sewerage Authority (DWASA)

Chittagong Water Supply & Sewerage Authority (CWASA)

Khulna Water Supply & Sewerage Authority (CWASA)

Rajshahi Water Supply & Sewerage Authority (RWASA)

Bangladesh Agricultural Development Corporation (BADC)

Department of Public Health Engineering (DPHE)





RFL PIPE & FITTINGS

From underground to the top floor of a skyscraper, from carrying water for farming & drinking to disposal of dirty water into sewerage lines or from protecting electrical lines of a house to carrying gas line to an industry, RFL has all kinds of pipe in its product basket. With the help of state of art technology and modern machineries, RFL is always in a journey of serving the nation by its superior product & service.

PRODUCT CATAGORIES

- Class Pipe Non Class Pipe Upvc filter SWR Pipe Thread Pipe Upvc fittings
 - Suction Hose Pipe Electric Hose Pipe Garden Hose Pipe Braided Hose Pipe
 - Conduit pipe Casing Capping HDPE Coil Pipe HDPE Bigger dia
- PP-R Pipe
 Saddle clamp
 Thread fittings
 MS & GI Pipe
 cPVC Pipe & Fittings

THE FOLLOWINGS ARE FEW ADVANTAGES OF RFL PIPE

- Strong and Durable Light Weight Easy Installation Low Installation Cost
- Convenient Joint
 Internal Corrosion Resistance
 Better Flow Characteristic
- Low Friction Loss
 Low Thermal Conductivity
 Long lasting and Maintenance Free

APPLICATIONS

- Water Supply System
 Irrigation System
 Tube wells
 Plumbing
- Sewer, Waste and Rain Water System
 Electrical Conduit
 Ventilation and Duct
- Cable Ducting Industrial Use
 Drainage Installations (Domestic and Industrial)
 Sea water

BRITISH STANDARD (BS) 3505: 1968

			Wall thickness									
Nominal Size	Outside	diameter	Class B 6.0 bar(60m head of water)		Class C 9.0 bar(90m head of water)			ss D head of water)	Class E 15.0 bar(150m head of water)			
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
inch	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)		
3/8	17.0(0.669)	17.3(0.681)			-			-	1.5(0.059)	1.9(0.075)		
1/2	21.2(0.835)	21.5(0.847)			*	-			1.7(0.067)	2.1(0.083)		
%	26.6(1.047)	26.9(1.059)							1.9(0.075)	2.5(0.098)		
1	33.4(1.315)	33.7(1.327)	-		-	-		-	2.2(0.087)	2.7(0.106)		
11/4	42.1(1.657)	42.4(1.669)					2.2(0.087)	2.7(0.106)	2.7(0.106)	3.2(0.126)		
11/2	48.1(1.894)	48.4(1.906)					2.5(0.098)	3.0(0.118)	3.1(0.122)	3.7(0.146)		
2	60.2(2.370)	60.5(2.382)		-	2.5(0.098)	3.0(0.118)	3.1(0.122)	3.7(0.146)	3.9(0.154)	4.5(0.177)		
21/2	75.0(2.962)	75.3(2.964)			3.0(0.118)	3.5(0.138)	3.9(0.154)	4.5(0.177)	4.8(0.189)	5.5(0.217)		
3	88.7(3.492)	89.1(3.508)	2.9(0.114)	3.4(0.134)	3.5(0.138)	4.1(0.161)	4.6(0.181)	5.3(0.209)	5.7(0.224)	6.6(0.260)		
4	114.1(4.492)	114.5(4.508)	3.4(0.134)	4.0(0.157)	4.5(0.177)	5.2(0.205)	6.0(0.236)	6.9(0.272)	7.3(0.287)	8.4(0.331)		
5	140.0(5.512)	140.4(5.528)	3.8(0.150)	4.4(0.173)	5.5(0.217)	6.4(0.252)	7.3(0.287)	8.4(0.331)	9.0(0.354)	10.4(0.409)		
6	168.0(6.614)	168.5(6.634)	4.5(0.177)	5.2(0.205)	6.6(0.260)	7.6(0.299	8.8(0.347)	10.2(0.402)	10.8(0.425)	12.5(0.492)		
7	193.5(7.618)	194.0(7.638)	5.2(0.205)	6.0(0.236)	7.7(0.303)	8.9(0.350)	10.1(0.398)	11.7(0.461)	12.4(0.488)	13.9(0.547)		
8	218.8(8.614)	219.4(8.638)	5.3(0.209)	6.1(0.240)	7.8(0.307)	9.0(0.354)	10.3(0.406)	11.9(0.469)	12.6(0.496)	14.5(0.571)		
9	244.1(9.610)	244.8(9.638)	5.9(0.232)	6.8(0.268)	8.7(0.342)	10.0(0.394)	11.5(0.453)	13.3(0.524)	14.1(0.555)	15.8(0.622)		
10	272.6(10.732)	273.4(10.764)	6.6(2.260)	7.6(0.299)	9.7(0.382)	11.2(0.441)	12.8(0.504)	14.8(0.583)	15.7(0.618)	18.1(0.713)		
12	323.4(12.732)	324.3(12.768)	7.8(0.307)	9.0(0.354)	11.5(0.453)	13.3(0.524)	15.2(0.598)	17.5(0.689)	18.7(0.736)	21.6(0.850)		
14	355.0(13.976)	356.0(14.015)	8.5(0.335)	9.8(0.386)	12.6(0.496)	14.5(0.571)	16.7(0.657)	19.2(0.756)	20.5(0.807)	23.6(0.929)		
16	405.9(15.980)	406.9(16.019)	9.7(0.382)	11.2(0.441)	14.5(0.571)	16.7(0.657)	19.0(0.748)	21.9(0.862)	23.4(0.921)	27.0(1.063)		
18	456.7(17.980)	457.7(18.019)	11.0(0.433)	12.7(0.500)	16.3(0.642)	18.8(0.740)	21.4(0.843)	24.6(0.969)	26.8	30		
20	507.5(19.980)	508.5(20.019)	12.2(0.480)	14.1(0.555)	18.1(0.713)	20.9(0.823)						
22	558.3(21.980)	559.3(22.019)	13.4(0.528)	15.5(0.610)	19.9(0.783)	22.9(0.902)						
24	609.1(23.980)	610.1(24.019)	14.6(0.575)	16.8(0.661)	21.7(0.854)	25.0(0.984)		-	-	2.42		

ISO 4422: 1996-2 (E)

Nominal	Tol. On OD(+)	Pipe Series 'S' and nominal pressure. PN in Mda (bar)													
outside Diameter		_	20 R 41 I 5	SDR	16.7 3404 N 6	SDI	16 R 33 6.3	SDI	12.5 R 26 N 8	SDF	10 R 2.1 10	SDF	8 R 17 12.5	PN PN	
OD mm DN		WALL THICKNESS													
DN		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20	0.3													1.5	1.9
25	0.3											1.5	1.9	1.9	2.3
32	0.3									1.6	2.0	1.9	2.3	2.4	2.9
40	0.3			***		1.5	1.9	1.6	2.0	1.9	2.3	2.4	2.9	3.0	3.5
50	0.3				-	1.6	2.0	2.0	2.4	2.4	2.9	3.0	3.5	3.7	4.3
63	0.3	1.6	2.0	1.9	2.3	2.0	2.4	2.5	3.0	3.0	3.5	3.8	4.4	4.7	5.5
75	0.3	1.9	2.3	2.2	2.7	2.3	2.7	2.9	3.4	3.6	4.2	4.5	5.2	5.5	6.5
90	0.3	2.2	2.7	2.7	3.2	2.8	3.3	3.5	4.1	4.3	5.0	5.4	6.3	6.7	7.8

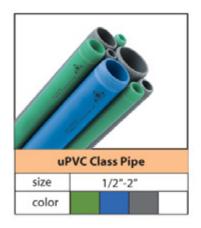
ISO 4422: 1996-2 (E)

Nominal outside Diameter OD mm DN				Pipe Serie	s 'S' and	nominal p	ressure.	PN in Mo	ia (bar)		
	Tol. On	SDI	20 R 41 6.3	16 5	S SDR PN 8	DR	2.5 S 26 10	SDF	10 2 2.1 12.5		SDR 17 N 6
	OD(+)	WALL THICKNESS									
DN		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
110	0.4	2.7	3.2	3.4	4.0	4.2	4.9	5.3	6.1	6.6	7.6
125	0.4	3.1	3.7	3.9	4.5	4.8	5.6	6.0	6.9	7.4	8.6
140	0.5	3.5	4.1	4.3	5.0	5.4	6.3	6.7	7.8	8.3	9.6
160	0.5	4.0	4.6	4.9	5.7	6.2	7.2	7.7	8.9	9.5	- 11
180	0.6	4.4	5.1	5.5	6.4	6.9	8.0	8.6	9.9	10.7	12.4
200	0.6	4.9	5.7	6.2	7.2	7.7	8.9	9.6	11.1	11.9	13.7
225	0.7	5.5	6.4	6.9	8.0	8.6	9.9	10.8	12.5	13.4	15.5
250	0.8	6.2	7.2	7.7	8.9	9.6	11.1	11.9	13.7	14.8	17.1
280	0.9	6.9	8.0	8.6	9.9	10.7	12.4	13.4	15.5	16.6	19.1
315	1.0	7.7	8.9	9.7	11.2	12.1	14.0	15.0	17.3	18.7	21.6
355	1.1	8.7	10.1	10.9	12.6	13.6	15.7	16.9	19.5	21.1	24.3
400	1.2	9.8	11.3	12.3	14.2	15.3	17.6	19.1	22.0	23.7	27.3
450	1.4	11.0	12.7	13.8	15.9	17.2	19.8	21.5	24.8	26.7	30.8
500	1.5	12.3	14.2	15.3	17.6	19.1	22.0	23.9	27.5	29.7	34.2
560	1.7	13.7	15.8	17.2	19.8	21.4	24.7	26.7	30.8		
630	1.9	15.4	17.8	19.3	22.2	24.1	27.8	30.0	34.5		

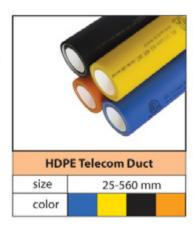






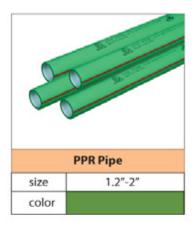








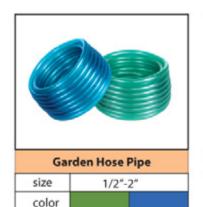


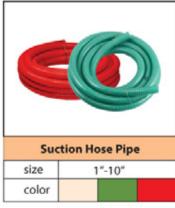




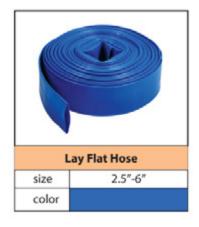






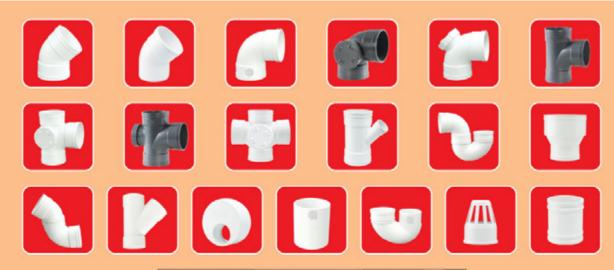












uPVC Fittings

size: 1/2"-250 mm

color:









Thread Fittings | size: 1/2"-2"

color:

PP-R PIPE DIMENSION CHART ACCORDING TO DIN 8077/78

		SDR-11		SDR-9		SDR-7.4		SDR-6		SDR-5	
		PN-10	9.5	PN-12.5		PN-16		PN-20		PN-25	
Size	OD	Wall Thickness	ID								
mm (inch)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20mm (1/2*)	20	1.9	16.2	2.3	15.4	2.8	14.4	3.4	13.2	4.1	11.8
25mm (3/4")	25	2.3	20.4	2.8	19.4	3.5	18	4.2	16.6	5.1	14.8
32mm (1")	32	2.9	26.2	3.6	24.8	4.4	23.2	5.4	21.2	6.5	19
40mm (1.25*)	40	3.7	32.6	4.5	31	5.5	29	6.7	26.6	8.1	23.8
50mm (1.5*)	50	4.6	40.8	5.6	38.8	6.9	36.2	8.3	33.4	10.1	29.8
63mm (2*)	63	5.8	51.4	7.1	48.8	8.6	45.8	10.5	42	12.7	37.6
75mm (2.5*)	75	6.8	61.4	8.4	58.2	10.3	54.4	12.5	50	15.1	44.8
90mm (3*)	90	8.2	73.6	10.1	69.8	12.3	65.4	15	60	18.1	53.8
110mm (4")	110	10	90	12.3	85.4	15.1	79.8	18.3	73.4	22.1	65.8

TECHNICAL DETAILS OF CPVC PIPE

	Outside Diameters and Wall Thicknesses For CPVC 4120, SDR 11 Plastic Pipe As Per ASTM D-2846													
Nomi	nal Size	Outside Diam	eter, in. (mm)	Wall Thickne	ess, in. (mm)	Pressure Rating.PSI (Kg/Cm²)								
(in.)	(mm)	Average	Tolerance	Minimum	Tolerance	73.4°F	(23°C)	180°F	(82°C)					
У.*	(15)	0.625 (15.9)	±0.003 (0.08)	0.068 (1.73)	+0.020 (0.51)	400	(28.1)	100	(7.0)					
%	(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)					
1%	(32)	1.375 (34.9)	±0.003 (0.08)	0.125 (3.18)	+0.020 (0.51)	400	(28.1)	100	(7.0)					
1%	(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 %" 1	wall thicknes	s minimum is not a fu	anction of SDR											

	Outside Diameters and Wall Thicknesses For CPVC 4120, SDR 13.5 Plastic Pipe														
Nomi	nal Size	Outside Diam	eter, in.(mm)	Wall Thickne	ess, in. (mm)	Press	ure Ratin	g.PSI (Kr	(Cm²)						
(in.)	(mm)	Average	Tolerance	Minimum	Tolerance	73.4°F	(23°C)	180°F	(82°C)						
% *	(15)	0.625 (15.9)	± 0.003 (0.08)	0.055 (1.40)	+0.020 (0.51)	320	(22.5)	80	(5.6)						
%	(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)						
1%	(32)	1.375 (34.9)	± 0.003 (0.08)	0.102 (2.59)	+0.020 (0.51)	320	(22.5)	80	(5.6)						
1%	(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	W" wall this	kness 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 Thickne	ess, in. (mm)	Pipe - Pr. R. PSI (Kg/Cm ³)		Fitting - Pr. R. PSI (Kg/Cm ²)							
(in.)	(mm)	Average	Tolerance	Average	Minimum	Tolerance	73.4°F	(23°C)	73.4°F	(23°C)				
21/2	(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)				

	Schedul 80 Piping System As per ASTM F 441													
Nominal Size Outside Diameter, in. (mm)		I.D.	Wall Thickne	Pipe-Pr. R. PSI (Kg/Cm²)		Fitting-Pr. R. PSI (Kg/Cm ²)								
(in.)	(mm)	Average	Tolerance	Average	Minimum	Tolerance	73.4°F	(23°C)	73.4°F	(23°C)				
21/2	(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)				

LABORATORY FACILITIES

We have fully equipped modern laboratory where tests of all products are done with sophisticated testing machines. Our products always comply with all the standards due to our regular checking and verification.

Available test arrangement:

- Universal testing machine (Tensile & Compressive)
- · Air less hydrostatic pressure test
- · Sulphated ash content test
- Carbon black content test
- Melt flow index test
- · Opacity test
- Particle analyzer
- · Vicat softening temperature test
- Impact test
- Density test

- · Heat reversion test
- ICOF test
- ESCR test
- · Oxygen induction test
- · Crush resistance tets
- Acetone test
- · Dichloromethane
- · Moisture content test
- Hydraulic testing
- · Flattering test





ISO 9001:2015 CERTIFICATION

CERTIFICATE OF APPROVAL

No. 107-00007-Q

This is to certify that the Quality Management System at

RFL Plastics Limited

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

Site 1: Pran Industrial Park, Bagpara, Polash, Narsingdi-1610. Bangladesh

Site 2: Murapara, Rupgani, Narayangoni-1464, Bangladesh

Site 3: Saoghat, Vulta, Rupganj, Narayangonj-1462, Bangladesh

Has been examined by assessors of QMS Certification Services and found to be conforming to the requirements of:

ISO 9001:2015 Quality Management Systems

In respect of the following activities:

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

> This certificate is valid from 31/08/2016 to 31/08/2019 Original certification date: 31/08/2016

Gerry Bonner, CPEng, BEng, FIE Aust, Chairman – GMSCS Pty Ltd. Approval: GMNICIS Pty Ltd. Inading as GMS Certification Services To verify the validity of this certificate please visit www.jac-anz.org/register.









