SPK Industries

RIFENG®

Water Systems
Pex & M.L.P

Gas Systems

Heating Systems

WaterMark™

CERTIFICATE
OF CONFORMITY

SAI GLOBAL
INFORM. INSPIRE. IMPROVE.

About Rifeng

The Rifeng Enterprise Co. Ltd is a global piping system supplier and the largest manufacturer of piping systems in the world. Rifeng was established over 19 years ago and has extensive experience in developing and producing plastic pipes, fittings and systems. They provide advanced piping solutions for plumbing, gas and heating transportation in all building types, from residential to industrial and commercial construction.

Rifeng's manufacturing capabilities command an enterprise of more than 330,000 square metres of manufacturing equipment, quality control and distribution with over 200 production lines and more than 5000 employees. They are also embarking on further expansion with many more plants planned to be built in China in the near future.

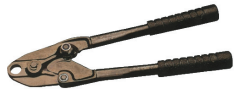
Rifeng's extensive range of products is being exported to over 100 countries around the world. Rifeng laboratories in China covers area of more than 1400m² and are equipped with more than USD6 million worth of laboratory equipment. Rifeng are recognised by the China National CNAS laboratory certification system as the ONLY manufacturer in China certified to conduct ALL testing required for PEX piping systems.

Rifeng quality has been approved by more than 60 International Certification bodies worldwide such as NSF (USA), WRAS (UK), SKZ (Germany), SAI Global and endeavours to provide its customers with diversity in choices as well as total quality satisfaction. By integration of their excellent R&D capability and production scale they are able to provide a range of services from OEM to tailored services for niche markets.

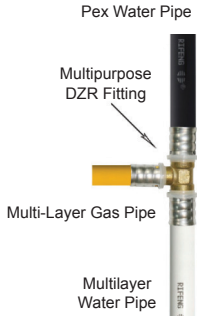
System Simplicity

Simple as 1+1=3

One Universal fitting that fits with 3 x different pipe systems. The choice is simple, it's Rifeng.



SPK - Rifeng piping systems provide the tradesman with an economical, easily installed and robust solution for potable Water, Natural Gas, LPG installations and Underfloor Heating. Simplicity is the key to SPK – Rifeng Systems because all systems utilise a universal high quality DZR Brass fitting, with Stainless Steel crimp ring which is suitable for Water and Gas, meaning less van stock, no confusion, and faster installation.



The SPK – Rifeng difference

- All fittings are suitable for Potable Water (Plumbing) and Gas (Natural and LPG).
- A choice of Pex or MLP (Multilayer) pipes for Potable Water (Plumbing) 16mm- 32mm.
- MLP (Multilayer) Gas pipe 16mm – 50mm.
- Heating systems use MLP (Multilayer) pipe* (*High temperature fittings are required and available for heating systems running continuously over 75°C). **Contact SPK for full details**.
- All SPK - Rifeng systems utilise a common crimping tool available in either manual or battery powered.

SPK - Rifeng Complete Solutions

- ISO9001 & ISO14001 certified
- AS4176 and AS2492 Certification and WaterMark
- World's biggest plastic pipe supplier
- Own Industrial Park - 330,000m² - 200 Production lines
- Water systems, Pex & Multilayer pipe system 16mm - 32mm
- Gas Multilayer system 16mm - 50mm
- Under floor heating, Heat pumps and MLP pipes for radiator installation

Water Products for Plumbing

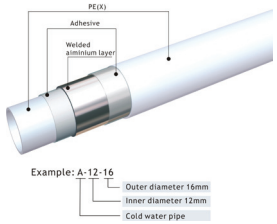
Two pipes are available for potable water, both utilize the SPK - Rifeng multipurpose DZR fitting.

PEX-b (Cross Linked Polyethylene) Pex is a new generation of plastic pipe which is increasing in popularity because of the ease of install and the excellent performance and flexibility of the product.

- SPK - Rifeng Pex pipes have a service life in excess of 50 years
- SPK - Rifeng Pex pipes have great flexibility making installation quick and easy
- SPK - Rifeng Pex pipes have good thermal and acoustic insulation properties
- SPK - Rifeng Pex pipes use the Universal DZR Water & Gas crimp fitting
- SPK - Rifeng Pex pipes are Certified to Australian standards AS2492
- SPK - Rifeng Pex systems carry a 25 year warranty

MLP Multilayer pipes

MLP pipes are a combination of plastic and metal technology and provide all the benefits of a metal pipe combined with the flexibility and ease of installation of a plastic pipe. MLP pipes have a layer of aluminium inside a double layer of Pex, making the pipe extra strong, yet flexible.



Overlapped welded pipe is co-extruded in one step with perfect adhesive between inner and outer layer and aluminum layer, providing high and stable pressure resistance.

- SPK - Rifeng MLP pipes have a service life in excess of 50 years
- SPK - Rifeng MLP pipes out perform any other plastic pipe for temperature and pressure
- SPK - Rifeng Pex pipes are flexible and can be bent by hand or tooling but remain rigid until bent providing the installer with straight pipe runs and a professional appearance
- SPK - Rifeng MLP pipes have good thermal and acoustic insulation properties
- SPK - Rifeng MLP pipes use the Universal DZR Water & Gas crimp fitting
- SPK - Rifeng MLP pipes are Certified to Australian standards AS4176
- SPK - Rifeng MLP pipes systems carry a 25 year warranty

SPK - Rifeng DZR Universal fittings

The SPK - Rifeng fittings are suitable for both Water and Gas and are made from high quality DZR Brass with a double O Ring system and Stainless Steel crimp ring. The Universal crimp fitting is a huge advantage for both the merchant and the installer as shelf and van stock are reduced and there is no risk in mixing dissimilar fittings.

- SPK - Rifeng DZR fittings are suitable for both water and gas
- SPK - Rifeng DZR fittings are Certified to Australian standards AS4176
- SPK - Rifeng DZR fittings are available in sizes 16mm to 32mm

Technical Data

		MLP* Water	Pex Water	MLP* Gas
Max Operating Temp (ºC)		95	80	40
Max Working Pressure(kPa)				
	16mm	1000	1000	400
	20mm	1000	800	400
	25mm	1000	–	400
	32mm	1000	–	400
	40mm	–	–	400
	50mm	–	–	400
Max Bend Radius x Diameter (D)		5	8	5
Oxygen Permeability		Nil	–	Nil

SPK - Rifeng Pex Pipe complies with AS/NZ3500.4. Ensure high temperature fittings are used on heating applications where the system will run over 75°C. * MLP = MultiLayer Pipe

Clipping of Pipes

In accordance with AS/NZS 3500, Rifeng pipes installed above ground shall be retained in position by clips at intervals complying with the table below:

	Maximum Spacing	
Pipe Diameter	**Horizontal**	**Vertical**
16mm	600mm	1200mm
20mm	700mm	1400mm
25mm	750mm	1500mm
32mm	850mm	1700mm

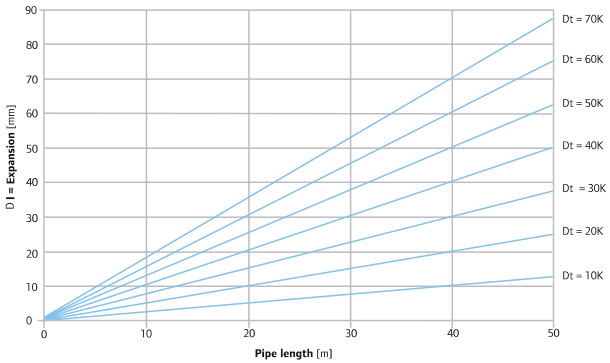
Handling, Storage and Installation

- UV radiation can damage plastic pipes, do not allow SPK-Rifeng pipes to be exposed to direct sunlight either before or after installation.
- Always protect pipes and fittings from damage either during transportation or storage, check pipes and fittings for damage before installation.
- Ensure water quality is good and pH levels are between 6.5-8.5.
- Always allow for expansion in all pipe runs and especially in hot water lines. (Refer graph pg.5)
- Protect pipes from freezing by insulation or draining the system when not in use.
- Do not use Pex or MLP pipes on installations with uncontrolled heat sources such as Solar or Wetbacks before a tempering valve.
- Rifeng gas pipes may be installed in concrete or under buildings in a continuous run and without joints or fittings in accordance with the building code.
  1) SPK Rifeng water pipes may be installed underground or under-slab so long as all fittings are kept to a minimum and are wrapped with a “Denso” type protective coating.
  2) No fittings should be installed within the concrete slab.
  3) All Rifeng pipes must be sleeved as they penetrate the slab. Use Rifeng pipe in conduit.
- Test SPK - Rifeng water systems at 1500kPa for 30 mintues, check crimps visually and after testing to ensure crimps are complete and no leaks have occurred. Crimps should also be checked with a SPK Rifeng ‘go gauge’.
- Flush pipes so they are clean and ready for use.

Rifeng MLP (Multilayer Pipe)

Expansion and Contraction – SPK – Rifeng MLP (Multilayer Pipe)

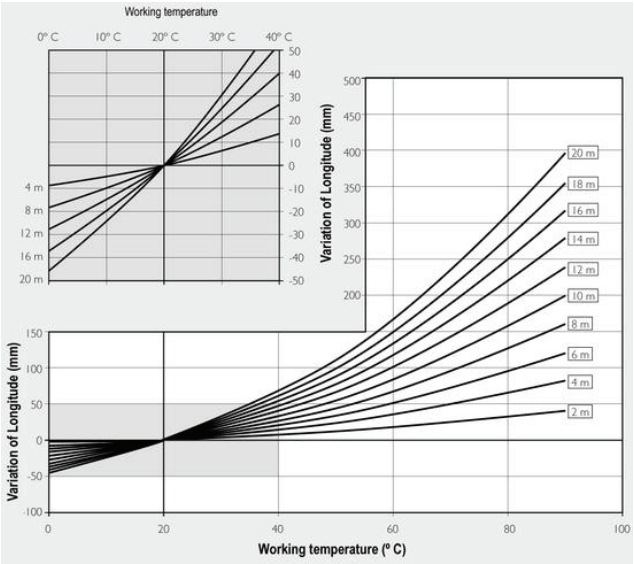
MLP pipe has a relatively low linear expansion rate compared with other plastic pipes because of the aluminum inner core. An allowance in linear length should be allowed, proportional to the water temperature increase. Please consult the chart below for expansion rates when designing a system – expansion loops or offsets should be considered for long runs.



Expansion and Contraction – SPK – Rifeng Pex Pipe

SPK – Rifeng Pex pipe has a higher linear expansion rate than MLP.

An allowance in linear length should be allowed, proportional to the water temperature increase. Please consult the chart adjacent for expansion rates when designing a system – expansion loops or offsets should be considered for long runs.



Pipe friction tables for SPK - Rifeng MLP & Pex Pipe

- Use the below information to calculate the pressure drop for a section of pipe for potable water installations.
- Maximum water velocity and the available pipe friction resistance are to be observed.
- The table below represents the pipe friction resistance and flow rates as a function of peak flow for cold water at 10°C.

Pipe OD size	16mm x 2mm wall		20mm x 2.3mm wall		25mm x 2.5 wall		32mm x 3mm wall	
ID size	12mm		15.4mm		20mm		26mm	
V/l	.11 l/m		.18 l/m		.31 l/m		.53 l/m	
Vs	v	R	v	R	v	R	v	R
l/s	m/s	kPa/m	m/s	kPa/m	m/s	kPa/m	m/s	kPa/m
0.01	0.09	0.022	0.05	0.007				
0.02	0.18	0.069	0.11	0.021				
0.03	0.27	0.136	0.16	0.041				
0.04	0.35	0.221	0.21	0.066				
0.05	0.44	0.323	0.26	0.097				
0.06	0.53	0.441	0.32	0.132				
0.07	0.62	0.575	0.37	0.172				
0.08	0.71	0.723	0.42	0.216				
0.09	0.8	0.886	0.48	0.191				
0.10	0.88	1.063	0.53	0.317	0.32	0.095	0.19	0.028
0.15	1.33	2.149	0.79	0.639				
0.20	1.77	3.552	1.06	1.054	0.64	0.315	0.38	0.091
0.25	2.21	5.255	1.32	1.556				
0.30	2.65	7.243	1.59	2.141	0.95	0.638	0.57	0.184
0.35	3.09	9.507	1.85	2.807				
0.40	3.54	12.039	2.12	3.552	1.27	1.055	0.75	0.303
0.45	3.98	14.833	2.38	4.372				
0.50	4.42	17.883	2.65	5.267	1.59	1.562	0.94	0.448
0.55	4.86	21.185	2.91	6.235				
0.60	5.31	24.733	3.18	7.274	1.91	2.155	1.13	0.617
0.65	5.75	28.524	3.44	8.384				
0.70	6.19	32.556	3.71	9.564	2.23	2.83	1.32	0.81
0.75	6.63	36.825	3.97	10.813				
0.80	7.07	41.327	4.24	12.129	2.55	3.586	1.51	1.025
0.85			4.5	13.512				
0.90			4.77	14.962	2.86	4.42	1.7	1.263
0.95			5.03	16.477				
1.00			5.3	18.057	3.18	5.33	1.88	1.522
1.05			5.56	19.702				
1.10			5.83	21.411	3.5	5.316	2.07	1.802
1.15			6.09	23.184				
1.20			6.36	25.019	3.82	7.376	2.26	2.103
1.25			6.62	26.917				
1.30			6.89	28.877	4.14	8.508	2.45	2.424
1.35			7.15	30.899				
1.40					4.46	9.712	2.64	2.77
1.50					4.77	10.988	2.83	3.13
1.60					5.09	12.333	3.01	3.51
1.70							3.2	3.91
1.80							3.39	4.33
1.90							3.58	4.77
2.00							3.77	5.23
2.10							3.96	5.70
2.20							4.14	6.20
2.30							4.33	6.71
2.40							4.52	7.25
2.50							4.71	7.80
2.60							4.9	8.36
2.70							5.09	8.95

Vs = peak flow in litres/second
v = water velocity in meters/second
R = pipe friction resistance in kilopascals/metre

Fittings frictional losses - equivalent metres (add the metre values to your pipe run to calculate total frictional losses)								
Fitting Type	16mm		20mm		25mm		32mm	
90° Bend	1.5m		1.2m		1.1m		1.0m	
T (Branch)	1.6m		1.5m		1.45m		1.35	
T (straight thru)	1.3m		.7m		.75m		.6m	
Straight reducer 1 reduction.	1.5m		1.2m		1.1m		1.0m	
Straight Connector	.9m		.6m		.3m		.25m	

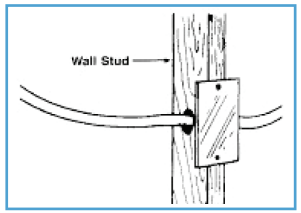
Installation Instructions

SPK – Rifeng Pex and MLP (Multi-Layer Pipe) should be installed in accordance with the relevant codes and requirements of the local Territorial Authority, and in accordance with the SPK – Rifeng technical documentation available from ***www.spk.co.nz***

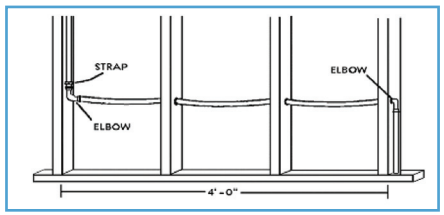
Do not install piping where it is exposed to sunlight, if installed outside, a duct, conduit or UV resistant paint (Refer Dulux spec sheet on request) may be applied to protect from sunlight.

Do not allow SPK – Rifeng piping to come into contact with the listed substances- (this list is not exhaustive) Any petroleum based materials or sealants such as Kerosene, Benzene, Gasoline, Solvents, Fuel oils, Cutting oils, Asphaltic paint, Acetone, Tolulene, Xylene.

Inspect all piping and fittings prior to installation for damage, do not install kinked, gouged or crushed pipe or previously used fittings. Ensure high temperature fittings are used on heating applications where the system will run over 75°C.

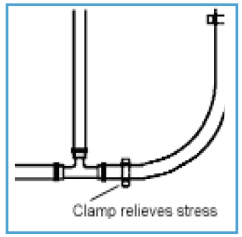


Penetration protection from gib board nails and screws are recommended – Pipe and cable protectors are available from SPK Industries.

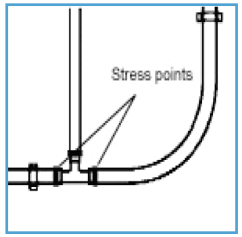


Do not pull pipework so tight as to leave no room for expansion and contraction during temperature changes especially in the hot water services.

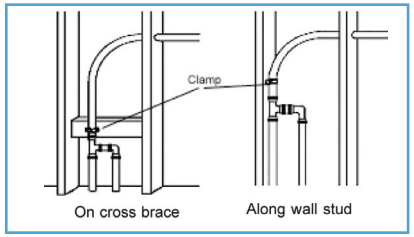
Pipes must be secured with SPK or approved clips that do not crush or pinch the pipe and suitable protection must be allowed for any penetrations through metal studs or nogs. Clip pipes so as to relieve expansion or mechanical stresses from pipework.



Correct



Incorrect



Correct

Installation Instructions

Instructions apply to all SPK-Rifeng pipe installations for Gas MLP, Water MLP and Pex Pipes

Step 1: Pipe cutting

Cut the pipe square and accurately with a pipe cutter

Step 2: Rounding, reaming and beveling

Proper bevelling is extremely important as it ensures the O Rings are protected and do not catch on the edge of the pipe. The bevelling tool will also round the pipe for easy insertion.

Step 3: Inserting

Choose the desired fitting and insert the pipe squarely and smoothly into the fitting, a ¼ turn twisting action can be utilized. Insert the pipe until the pipe is visible through the witness holes in the base of the crimp ring.

Step 4: Pressing

Crimping may be completed with either an approved manual tool or battery tool. Select the correct size jaw and tool. Place the jaws around the fitting with the edge of the jaw touching the plastic crimp ring holder. Depress manual tool handles until the handle touch points are fully closed. If using a battery tool, please ensure the tool is properly charged and depress the trigger until the jaws are completely closed or the tool auto releases. Fittings should be checked with a SPK-Rifeng go gauge.

Tools:

Manual Tools are available for sizes 16mm–32mm
Mini Battery Tools are available for sizes 16mm–40mm
Larger battery tools are available for sizes 16mm–50mm

Pex Pipe & MLP (Multi-layer Pipe)

Applications and Limitations –Pex Pipe & MLP (Multi-layer Pipe)

- White MLP (Multi-layer pipe) for plumbing and heating purposes and is available in sizes 16mm- 32mm.
- SPK-Rifeng White MLP pipe has an inner layer of aluminium creating an oxygen barrier and is therefore suitable for underfloor heating and radiator work as well as plumbing applications.
- If a heating system is to run at over 75°C high temperature fittings are required – a full range of high temperature fittings are available from SPK Industries.
- SPK – Rifeng Black Pex pipe is used for hot and cold plumbing applications and is available in sizes 16mm and 20mm. The Universal DZR plumbing and gas fittings are suitable for SPK – Rifeng Pex pipe.

All designs, applications, installation and commissioning work must comply with the national or territorial authority regulations and the SPK – Rifeng technical document. If any information is not found within this document please contact SPK Industries Ltd on 09-271-3720 or sales@spk.co.nz All flow rates and loadings should comply with AS/NZ3500.

Water Hammer

SPK – Rifeng Pex pipe has excellent ability to reduce water hammer due to its flexibility. MLP however has a metal component with an inner layer of Aluminium making it semi rigid. It is important that clipping is installed to prevent movement. Penetrations through timber must be secured or packed so as not to rattle if water hammer should occur.

Caulk or sealant may be used around exterior openings to prevent drafts or to stabilize pipe penetrations through timber to prevent rattling if water hammer was to occur. However, use only water-soluble gypsum-based caulk or neutral cure silicon's around SPK – Rifeng Pex or MLP pipe. Petroleum based caulks and sealants deteriorate the plastic and will void warranty.

Freeze Resistance of MLP (Multilayer Pipe)

MLP pipe has an inner layer of aluminium making the pipe semi rigid. Steps must be taken to ensure freezing does not occur as the pipe could rupture due to expansion of the water contained within the pipe if not properly insulated. Please insulate according to the NZBC or AS/NZ 3500.4 in accordance with the zoning maps in Figure 8.3.

Freeze Resistance of Pex pipe

SPK – Rifeng Pex Black pipe is more resistant to the effects of freezing than MLP as Pex pipe expands during freezing and then returns to its normal diameter so long as the pipe can expand along the entire length evenly. No pipe is completely immune to rupture during freezing so all care must be taken to insulate properly and in accordance with AS/NZ 3500.4 and your local territorial authority.

About SPK-Rifeng Gas

Rifeng Gas systems are New Zealand's most popular multilayer gas system. The multilayer pipe has an inner layer of aluminium with Pex either side making it a flexible, strong and oxygen impermeable conduit for both Natural Gas and LPG.

SPK – Rifeng Gas boasts the largest range of fittings on the market with sizes from 16mm OD to 50mm OD and is easy to install and crimp with high quality Stainless steel crimp rings. For extra safety all SPK – Rifeng fittings have double O Rings on each insertion barb, ensuring a gas tight seal every time.

SPK- Rifeng Gas systems carry SAI Global certification AS4176 Standards Mark and SGS certification also. SPK – Rifeng gas systems carry a 25 year warranty and have a service life of 50 years +.

Gas Pipe

Diameter	Wall	Length & Code		
16mm	2.0mm	5m RG16-5M	50m RG1650	50m RGC1650
20mm	2.0mm	5m RG20-5M	50m RG2050	50m RGC2050
25mm	2.5mm	5m RG25-5M	50m RG2550	50m RGC2550
32mm	3.0mm	5m RG32-5M	50m RG3250	50m RGC3250
40mm	4.0mm	5m RG40-5M		
50mm	4.5mm	5m RG50-5M		

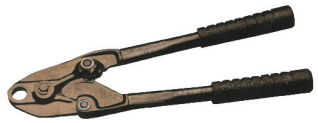
REMS MINI PRESS TOOLS 16MM - 32MM

A full range of Rems battery tooling is available on request, REMS Mini tools crimp sizes 16mm - 40mm

Rems Akku tools are required for 50mm.

MANUAL TOOLS 16MM - 20MM

Manual tools are available also



Please contact SPK industries or www.spk.co.nz for a full list of Rifeng Tooling.

Rifeng Gas Sizing Charts

(Natural Gas only)	NATURAL GAS flow through PE-X/AL/PE-X Composite Pipe Crimped Fittings (MJ/h)															Pressure Drop of 0.75 kPa (Meter Pressure 1.1kPa)								Fitting Allowance (M)		
Length of run (M)	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Correction(+) M
Pipe Size 16	84	57	45	38	37	36	34	30	27	24	19	16	14	12	11	10	9	8	/	/	/	/	/	/	/	/	1.3
20	158	106	84	72	63	57	52	48	45	43	41	40	35	30	27	24	22	20	18	17	/	/	/	/	/	/	1.2
25	314	211	167	142	125	113	103	96	89	84	79	75	71	68	64	62	60	58	54	50	48	46	45	45	44	44	0.5
32	602	405	322	273	240	216	198	184	172	162	142	128	117	109	102	98	95	89	85	83	80	78	76	74	73	71	0.6
40	985	663	526	446	393	354	324	300	281	264	233	210	192	178	166	157	150	141	136	131	126	121	117	113	110	107	0.9
50	1900	1278	1014	860	757	682	625	579	541	510	449	404	370	343	321	302	285	272	256	248	238	229	221	214	207	201	n/a

(Natural Gas only)	NATURAL GAS flow through PE-X/AL/PE-X Composite Pipe Crimped Fittings (MJ/h)															Pressure Drop of 0.75 kPa (Meter Pressure 2.75kPa)										
Length of run (M)	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Correction(+) M
Pipe Size 16	315	214	168	142	125	113	103	96	90	84	74	67	61	57	53	50	47	45	42	44	39	37	36	35	34	33	1.7
20	589	396	314	267	235	212	194	179	168	158	139	125	115	106	99	94	88	84	80	77	74	71	69	67	65	63	1.4
25	1169	787	624	530	466	420	385	356	333	314	276	249	228	211	197	186	181	178	167	157	151	146	141	137	113	128	0.8
32	2246	1511	1199	1017	895	807	739	684	640	602	530	478	438	405	379	357	340	335	329	321	309	298	287	278	270	262	0.6
40	3671	2470	1960	1662	1463	1319	1207	1119	1046	985	867	781	715	663	620	583	555	526	505	484	466	449	434	420	408	396	n/a
50	7082	4766	3780	3207	2823	2544	2329	2158	2018	1900	1672	1507	1380	1278	1195	1125	1027	1014	936	897	863	832	804	778	756	734	n/a

(LP Gas only)	LP Gas flow through PE-X/AL/PE-X Composite Pipe Crimped Fittings (MJ/h)															Pressure Drop of 0.250 kPa (Meter Pressure 2.75kPa)										
Length of run (M)	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Correction(+) M
Pipe Size 16	448	303	241	204	180	162	148	137	128	116	106	95	88	81	76	71	67	64	61	58	56	54	52	50	48	47	1.7
20	847	574	388	388	342	308	282	262	245	229	203	182	167	155	144	136	129	123	117	112	107	104	100	96	94	91	1.4
25	1721	1169	792	792	699	631	578	536	501	473	416	375	343	318	298	280	265	252	241	231	222	214	206	200	192	188	0.8
32	3463	2358	1602	1602	1414	1276	1171	1086	1016	963	844	762	698	647	606	570	540	514	491	471	453	436	421	408	396	384	0.6
40	4921	3354	2281	2281	2014	1819	1669	1548	1449	1366	1205	1087	997	924	865	815	772	735	702	673	647	624	603	583	566	550	n/a
50	9076	6197	4222	4222	3730	3370	3093	2871	1688	2534	2237	2020	1852	1719	1608	1516	1436	1368	1307	1254	1206	1162	1124	1088	1055	1024	n/a

(LP Gas only)	LP Gas flow through PE-X/AL/PE-X Composite Pipe Crimped Fittings (MJ/h)															Pressure Drop of 10.0kPa (Meter Pressure – 70.0kPa)										
Length of run (M)	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Correction(+) M
Pipe Size 16	2805	1968	1597	1377	1226	1115	1029	959	903	854	759	689	635	592	556	525	499	477	457	439	423	408	395	383	372	361	1.7
20	6188	4347	3531	3045	2714	2470	2280	2127	2001	1894	1685	1533	1413	1316	1237	1171	1112	1063	1018	979	943	911	882	855	830	809	1.4
25	11467	8060	6552	5654	5042	4590	4239	3955	3721	3523	3137	2853	2632	2454	2306	2182	2075	1983	1900	1827	1762	1702	1649	1599	1552	1512	0.8
32	24003	16887	13737	11860	10579	9635	8901	8309	7820	7406	6598	6003	5541	5168	4860	4599	4375	4181	4008	3855	3718	3593	3481	3377	3280	3194	0.6
40	35937	25294	20582	17774	15885	14445	13347	12463	11730	11110	9903	9010	8319	7761	7299	6910	6574	6283	6024	5795	5589	5403	5233	5078	4936	4804	n/a
50	66663	46949	38219	33016	29467	26847	24813	23174	21816	20667	18427	16775	1549	14457	13601	12878	12256	11713	11235	10809	10427	10081	9766	9478	9252	8969	n/a

Pipe Sizing Instructions

All Gas installations must be sized correctly to obtain the required flow, even when the system is under load.

1. Draw a schematic of the pipe system and list all the gas data of the appliances.
2. Calculate the path of the largest load including the length in metres of that path.
3. Sum the lengths of pipe along this path from the source to the termination at the appliance.
4. Calculate the total system load (MJ's) with all appliances running simultaneously. This includes all units on both the main trunk run and separate off takes.
5. Find the correction factor for the fittings. Reference the appropriate table in the SPK - Rifeng Catalogue - Gas Sizing Chart - that matches the gas data list (gas type, correct meter pressure and drop). Ensure the row selected exceeds total mj's required. The correction factor is on the far right column.
6. Count the number of fittings on pathway schematic. Ensure it includes the fittings at the source and the final termination. Multiply the number of fittings by the correction factor.
7. Now calculate the corrected length by adding the result in step 3 and step 6.
8. Referencing the values equal to or greater for the new increased length from the table ensuring select the correct pipe sizes by this figure related equals or exceeds the total mj's required.

A 'Pipe Sizing Example' is avaliable from SPK at sales@spk.co.nz

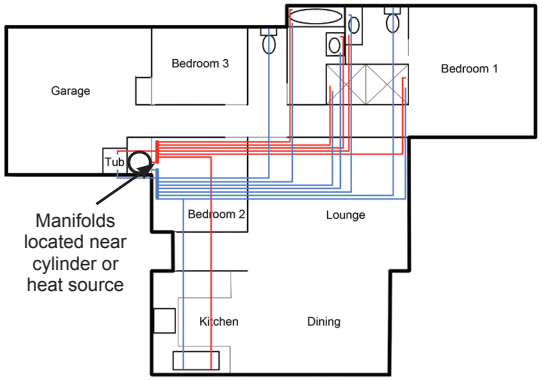
Handling, Storage and Installation.

- UV radiation can damage plastic pipes, do not allow SPK-Rifeng pipes to be exposed to direct sunlight either before or after installation.
- Always protect pipes and fittings from damage either during transportation or storage, check pipes and fittings for damage before installation.
- All SPK – Rifeng pipes may be installed underground in concrete or under buildings in a continuous run and without joints or fittings in accordance with the gas and building codes.
- Test SPK – Rifeng Gas systems at 3 x working pressure and in accordance with the NZ Gas code, check crimps visually. Crimps should also be checked with a go-no-go guage.
- SPK – Rifeng Gas systems should always be installed by or under the supervision of a Craftsman Gasfitter.
- SPK – Rifeng Gas pipe and fittings are rated for a maximum pressure of 400kPa and a maximum temperature of 60°C.
- Ensure SPK – Rifeng Gas pipes are protected from harmful conditions or situations including attack from rodents.

Manifold System

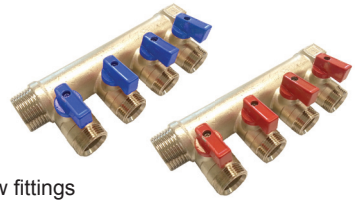
SPK – Easy Flow Manifold System draws from 50 over years of experience from Europe and America and is the new wave of design for New Zealand domestic plumbing installations.

The advantages provided by Easy Flow are numerous and the simplicity and speed of installation is second to none.



Easy Flow Manifold system provides

- Balanced pressure
- Even flow rates
- Energy savings – Less hot water wasted
- Quick installation and simple design
- Water savings – Less water wasted saving money over the life of the system (hot water arrives quicker at outlet)
- Individual outlet isolation for maintenance
- Priority feeds to every outlet, no restrictions from tees and elbow fittings



Simply locate a manifold with enough ports to feed the entire house as close to the hot water cylinder or instantaneous water heater as possible and run a single 16mm OD (12mm ID) dedicated line to each individual outlet. The cold feed to the manifold should be drawn off after the limiting valve to ensure perfectly balanced pressure.

The Easy Flow system provides water and energy savings throughout the life of the system because of the dedicated line to each fitting. Hot water arrives quicker at each outlet and less hot water is left to cool in the pipe than in a traditional line and branch system.

Easy Flow is extremely fast to install as each pipe is run in a continuous length so no fittings are required, limited cutting and joining of pipe work saving time and money and because each outlet has a dedicated feed no pipe sizing is required in most situations, meaning it is difficult to get the design wrong.

Pipe work can also be run under the slab in a continuous length, halving pipe out time because no holes need to be drilled in timber. Conduit is available to allow pipes to be replaced without cutting concrete after the service life of 50+ years has concluded, if required.

Single hot water lines, can be run from the hot water cylinder to the kitchen a maximum of 17.7 meters complying with regulation in NZS 4305:1996 which limits the volume of the kitchen hot line to 2 litres from cylinder to outlet.

Manifolds come with various outlet numbers and can be joined to create the desired number of feeds per individual job.

Universal Fitting 16-32mm for water and gas

PEX PIPE FOR WATER (BLACK)

RPEX1650	RIFENG WATER PEX PIPE 16MM X 50MTR COIL
RPEX16100	RIFENG WATER PEX PIPE 16MM X 100MTR COIL
RPEX20100	RIFENG WATER PEX PIPE 20MM X 100MTR COIL
RPEX16L5	RIFENG WATER PEX PIPE 16MM X 5MTR STRAIGHT
RPEX20L5	RIFENG WATER PEX PIPE 20MM X 5MTR STRAIGHT

MULTILAYER FOR WATER (WHITE)

RW1650	RIFENG WATER PIPE 16MM X 50MTR COIL
RW16100	RIFENG WATER PIPE 16MM X 100MTR COIL
RW2050	RIFENG WATER PIPE 20MM X 50MTR COIL
RW2550	RIFENG WATER PIPE 25MM X 50MTR COIL
RW3250	RIFENG WATER PIPE 32MM X 50MTR COIL
RW16-5M	RIFENG WATER PIPE 16MM X 5MTR LENGTH
RW20-5M	RIFENG WATER PIPE 20MM X 5MTR LENGTH
RW25-5M	RIFENG WATER PIPE 25MM X 5MTR LENGTH
RW32-5M	RIFENG WATER PIPE 32MM X 5MTR LENGTH

MULTILAYER FOR GAS (YELLOW)

RG1650	RIFENG GAS PIPE 16MM X 50MTR COIL
RG2050	RIFENG GAS PIPE 20MM X 50MTR COIL
RG2550	RIFENG GAS PIPE 25MM X 50MTR COIL
RG3250	RIFENG GAS PIPE 32MM X 50MTR COIL
RG16-5M	RIFENG GAS PIPE 16MM X 5MTR LENGTH
RG20-5M	RIFENG GAS PIPE 20MM X 5MTR LENGTH
RG25-5M	RIFENG GAS PIPE 25MM X 5MTR LENGTH
RG32-5M	RIFENG GAS PIPE 32MM X 5MTR LENGTH
RG40-5M	RIFENG GAS PIPE 40MM X 5MTR LENGTH
RG50-5M	RIFENG GAS PIPE 50MM X 5MTR LENGTH

PRE-INSULATED PIPE

RWPI1650	RIFENG MULTILAYER PRE-INSULATED 16MM X 50M
RWPI2050	RIFENG MULTILAYER PRE-INSULATED 20MM X 50M
RWPI2550	RIFENG MULTILAYER PRE-INSULATED 25MM X 50M
RWPI3250	RIFENG MULTILAYER PRE-INSULATED 32MM X 50M

PEX PIPE IN CONDUIIT

RPEXCON1650	PEX PIPE 16MM X 50MTR CL IN CORROGTD BLK CONDUIT
RPEXCON2050	PEX PIPE 20MM X 50MTR CL IN CORROGTD BLK CONDUIT

GAS PIPE IN CONDUIT

RGC1650	RIFENG GAS PIPE IN CONDUIT 16MM X 50MTR COIL
RGC2050	RIFENG GAS PIPE IN CONDUIT 20MM X 50MTR COIL
RGC2550	RIFENG GAS PIPE IN CONDUIT 25MM X 50MTR COIL
RGC3250	RIFENG GAS PIPE IN CONDUIT 32MM X 50MTR COIL

UNDERFLOOR HEATING PIPE (RED)

REVOH16300	RIFENG PEX-B 16MM OD, RED EVOH U/Floor PIPE 300M COIL

WATER PEX PIPE (RED)

RPEXRED1650	RIFENG WATER PEX PIPES 16MM X 50MTR COIL - RED

WATER PEX PIPE (BLUE)

RPEXBLUE1650	RIFENG WATER PEX PIPES 16MM X 50MTR COIL - BLUE

WATER PEX PIPE - LILAC (PURPLE)

RPEXLILAC16100	RIFENG - GREY WATER PEX PIPE - LILAC 16MM X 100MTR COIL
RPEXLILAC2050	RIFENG - GREY WATER PEX PIPE - LILAC 20MM X 50MTR COIL

RAIN WATER PEX PIPE (GREEN)

RPEXGREEN1650	RIFENG RAIN WATER PEX PIPES 16MM X 50MTR COIL - GREEN

Universal Fitting 16-32mm for water and gas

COUPLINGS

RWSC16	RIFENG STRAIGHT COUPLING 16MM DZR
RWSC20	RIFENG STRAIGHT COUPLING 20MM DZR
RWSC25	RIFENG STRAIGHT COUPLING 25MM DZR
RWSC32	RIFENG STRAIGHT COUPLING 32MM DZR

REDUCING COUPLING

RWRC2016	RIFENG REDUCING COUPLING 20 - 16MM DZR
RWRC2516	RIFENG REDUCING COUPLING 25 - 16MM DZR
RWRC2520	RIFENG REDUCING COUPLING 25 - 20MM DZR
RWRC3225	RIFENG REDUCING COUPLING 32 - 25MM DZR

ELBOW

RWE16	RIFENG ELBOW 16MM DZR
RWE20	RIFENG ELBOW 20MM DZR
RWE25	RIFENG ELBOW 25MM DZR
RWE32	RIFENG ELBOW 32MM DZR

TEE

RWT16	RIFENG TEE 16MM DZR
RWT20	RIFENG TEE 20MM DZR
RWT25	RIFENG TEE 25MM DZR
RWT32	RIFENG TEE 32MM DZR

TEE - REDUCING (END/BRANCH/END)

RWRT162016	RIFENG REDUCING TEE 16/20/16MM DZR
RWRT2016	RIFENG REDUCING TEE 20/16/20MM DZR
RWRT202016	RIFENG REDUCING TEE 20/20/16MM DZR
RWRT201616	RIFENG REDUCING TEE 20/16/16MM DZR
RWRT2516	RIFENG REDUCING TEE 25/16/25MM DZR
RWRT251616	RIFENG REDUCING TEE 25/16/16MM DZR
RWRT2520	RIFENG REDUCING TEE 25/20/25MM DZR
RWRT252020	RIFENG REDUCING TEE 25/20/20MM DZR
RWRT252520	RIFENG REDUCING TEE 25/25/20MM DZR
RWRT3216	RIFENG REDUCING TEE 32/16/32MM DZR
RWRT3220	RIFENG REDUCING TEE 32/20/32MM DZR
RWRT3225	RIFENG REDUCING TEE 32/25/32MM DZR

RIFENG FEMALE WINGBACK ELBOWS

RWFWBE1615	RIFENG FEMALE W/BACK ELBOW 16MM - 1/2' DZR
RWFWBE1620	RIFENG FEMALE W/BACK ELBOW 16MM - 3/4' DZR
RWFWBE2015	RIFENG FEMALE W/BACK ELBOW 20MM - 1/2' DZR
RWFWBE2020	RIFENG FEMALE W/BACK ELBOW 20MM - 3/4' DZR
RWFWBE2520	RIFENG FEMALE W/BACK ELBOW 25MM - 3/4' DZR

RIFENG FEMALE WINGBACK ELBOW DOUBLE FIXED

RWFWBE1615DF	RIFENG FEMALE W/BACK ELBOW 16MM-1/2" DZR DOUBLE FIX

RIFENG MALE WINGBACK ELBOWS

RWMWBE1615	RIFENG MALE W/BACK ELBOW 16MM - 1/2' DZR - 95MM LONG
RWMWBE2015	RIFENG MALE W/BACK ELBOW 20MM - 1/2' DZR - 100MM LONG
RWMWBE2020	RIFENG MALE W/BACK ELBOW 20MM - 3/4' DZR - 100MM LONG
RWMWBE1615-135	RIFENG MALE W/BACK ELBOW 16MM - 1/2"-135MM THREAD LGTH

HOSE PLATES - FEMALE

RWHP1615	RIFENG HOSE PLATE 16MM X 15MM FEMALE
RWHP2020	RIFENG HOSE PLATE 20MM X 20MM FEMALE

SWIVEL STRAIGHT CONNECTOR

RWFSC1615	RIFENG FEMALE-SWIVEL COUPLING 16MM - 1/2' DZR
RWFSC1620	RIFENG FEMALE-SWIVEL COUPLING 16MM - 3/4' DZR
RWFSC2015	RIFENG FEMALE-SWIVEL COUPLING 20MM - 1/2' DZR
RWFSC2020	RIFENG FEMALE-SWIVEL COUPLING 20MM - 3/4' DZR
RWFSC2520	RIFENG FEMALE-SWIVEL COUPLING 25MM - 3/4' DZR
RWFSC2525	RIFENG FEMALE-SWIVEL COUPLING 25MM - 1' DZR
RWFSC3232	RIFENG FEMALE-SWIVEL COUPLING 32MM - 1 1/4' DZR

Universal Fitting 16-32mm for water and gas

	POLYBUTE STRAIGHT COUPLING
RWSC16PB	RIFENG DZR STRAIGHT PB COUPLING 16MM
RWSC20PB	RIFENG DZR STRAIGHT PB COUPLING 20MM
	SWIVEL ELBOW
RWSE1615	RIFENG SWIVEL ELBOW 16MM - 1/2' DZR
RWSE2015	RIFENG SWIVEL ELBOW 20MM - 1/2' DZR
RWSE2020	RIFENG SWIVEL ELBOW 20MM - 3/4' DZR
RSE1615G	RIFENG GAS SWIVEL ELBOW 16MMX 1/2" - FLAT BLACK WASHER
	FEMALE COUPLING
RWFC1615	RIFENG FEMALE COUPLING 16MM - 1/2' DZR
RWFC2015	RIFENG FEMALE COUPLING 20MM - 1/2' DZR
RWFC2020	RIFENG FEMALE COUPLING 20MM - 3/4' DZR
RWFC2520	RIFENG FEMALE COUPLING 25MM - 3/4' DZR
RWFC3220	RIFENG FEMALE COUPLING 32MM - 3/4' DZR
	MALE COUPLING
RWMC1615	RIFENG MALE COUPLING 16MM - 1/2'DZR
RWMC2015	RIFENG MALE COUPLING 20MM - 1/2' DZR
RWMC2020	RIFENG MALE COUPLING 20MM - 3/4' DZR
RWMC2515	RIFENG MALE COUPLING 25MM - 1/2' DZR
RWMC2520	RIFENG MALE COUPLING 25MM - 3/4' DZR
RWMC2525	RIFENG MALE COUPLING 25MM - 1' DZR
RWMC3225	RIFENG MALE COUPLING 32MM - 1' DZR
RWMC3232	RIFENG MALE COUPLING 32MM - 1 1/4' DZR
	FEMALE ELBOW
RWFE1615	RIFENG FEMALE ELBOW 16MM - 1/2' DZR
RWFE2015	RIFENG FEMALE ELBOW 20MM - 1/2' DZR
	MALE ELBOW
RWME1615	RIFENG MALE ELBOW 16MM - 1/2' DZR
RWME2020	RIFENG MALE ELBOW 20MM - 3/4' DZR
	END CAP
RWC15	RIFENG END CAP 16MM DZR
RWC20	RIFENG END CAP 20MM DZR
RWC25	RIFENG END CAP 25MM DZR
RWC32	RIFENG END CAP 32MM DZR
	PIPE CLIPS - BLACK
RCP16B	RIFENG PIPE CLIPS WITH NAIL 16MM - BLACK
RCP20B	RIFENG PIPE CLIPS WITH NAIL 20MM - BLACK
RCP25B	RIFENG PIPE CLIPS WITH NAIL 25MM - BLACK
	PIPE CLIPS - YELLOW
RCP16Y	RIFENG PIPE CLIPS WITH NAIL 16MM - YELLOW
RCP20Y	RIFENG PIPE CLIPS WITH NAIL 20MM - YELLOW
RCP25Y	RIFENG PIPE CLIPS WITH NAIL 25MM - YELLOW
RCP32Y	RIFENG PIPE CLIPS WITH NAIL 25MM - YELLOW
	CLIPS - WHITE
RPS16	WHITE PLASTIC U CUP 16MM-W/OUT SCREW
RPS20	WHITE PLASTIC U CUP 20MM-W/OUT SCREW
RPS25	WHITE PLASTIC U CUP 25MM-W/OUT SCREW
RPS32	WHITE PLASTIC U CUP 32MM-W/OUT SCREW
	BEND GUIDES
511250	PRE-FORMED 90° BEND TO GUIDE 1216 PIPE
511251	PRE-FORMED 90° BEND TO GUIDE 1620 PIPE
	TOOLS - REAMERS
RPR1625	RIFENG PLASTIC REAMER 16-25MM
RPR2032	RIFENG PLASTIC REAMER 20-32MM

RIFENG Fittings for Water & Gas

	TOOLS - RED T-HANDLED REAMER
RJD-2632	RIFENG LENGTHENED T-REAMER 32MM
	RIFENG CRIMP GAUGE
ROGOGAUGE1632	RIFENG CRIMP GO GAUGE 16-32MM
	EXTERNAL BENDING SPRING
RWH1216E	RIFENG EXTERNAL BENDING SPRING 16MM
RWH1620E	RIFENG EXTERNAL BENDING SPRING 20MM
	INTERNAL BENDING SPRING
RWH1216	RIFENG INTERNAL BENDING SPRING 16MM
RWH1620	RIFENG INTERNAL BENDING SPRING 20MM
RWH2025	RIFENG INTERNAL BENDING SPRING 25MM
RWH2632	RIFENG INTERNAL BENDING SPRING 32MM
	MANUAL CRIMPING TOOL
RMCT16A	RIFENG MANUAL CRIMPING TOOL 16MM - BLACK HANDLE
RMCT20A	RIFENG MANUAL CRIMPING TOOL 16MM - BLACK HANDLE

BATTERY TOOLS AVAILABLE ON REQUEST

	COUPLINGS
RSC40	RIFENG STRAIGHT COUPLING 40MM
RSC50	RIFENG STRAIGHT COUPLING 50MM
	REDUCING COUPLINGS
RRC3220	RIFENG REDUCING COUPLING 30X20MM
RRC4025	RIFENG REDUCING COUPLING 40X25MM
RRC4032	RIFENG REDUCING COUPLING 40X32MM
RRC5040	RIFENG REDUCING COUPLING 50X40MM
	FEMALE COUPLINGS
RFC4025	RIFENG FEMALE COUPLING 40 - 1'
RFC4032	RIFENG FEMALE COUPLING 40 - 1 1/4'
RFC4040	RIFENG FEMALE COUPLING 40 - 1 1/2'
RFC5025	RIFENG FEMALE COUPLING 50 - 1'
RFC5040	RIFENG FEMALE COUPLING 50 - 1 1/2'
	MALE COUPLINGS
RMC3220	RIFENG MALE COUPLING 32 - 3/4'
RMC4025	RIFENG MALE COUPLING 40 - 1'
RMC4032	RIFENG MALE COUPLING 40 - 1 1/4'
RMC4040	RIFENG MALE COUPLING 40 - 1 1/2'
RMC5040	RIFENG MALE COUPLING 50 - 2'
	FEMALE ELBOWS
RFE4040	RIFENG FEMALE ELBOW 40MM - 1 1/2'
RFE5040	RIFENG FEMALE ELBOW 50MM - 1 1/2'
	MALE ELBOWS
RME4025	RIFENG MALE ELBOW 40 - 1'
RME5040	RIFENG MALE ELBOW 50 - 1 1/2'
	EQUAL TEES
RT40	RIFENG TEE 40MM
RT50	RIFENG TEE 50MM
	ELBOWS
RE40	RIFENG ELBOW 40MM
RE50	RIFENG ELBOW 50MM
	REDUCING TEES (END/BRANCH/END)
RRT4025	RIFENG REDUCING TEE 40/25/40MM
RRT4032	RIFENG REDUCING TEE 40/32/40MM
RRT5040	RIFENG REDUCING TEE 50/40/50MM

RIFENG Fittings for Water & Gas

FEMALE TEES (END/BRANCH/END)

RFT1615	RIFENG FEMALE TEE 16 - 1/2' - 16MM
RFT2020	RIFENG FEMALE TEE 20 - 3/4' - 20MM
RFT2525	RIFENG FEMALE TEE 25 - 1' - 25MM
RFT3225	RIFENG FEMALE TEE 32 - 1' - 32MM

RIFENG GAS VALVES

RBVF1615	RIFENG SWIVEL GAS BALL VALVE 16MM X 1/2'
RBVF2020	RIFENG SWIVEL GAS BALL VALVE 20MM X 3/4'
RBVF2520	RIFENG SWIVEL GAS BALL VALVE 25MM X 3/4'

RIFENG WATER VALVES

RBVF1615W	RIFENG SWIVEL WATER BALL VALVE 16X1/2"
RBVF2020W	RIFENG SWIVEL WATER BALL VALVE 20X3/4"
RBVF2520W	RIFENG SWIVEL WATER BALL VALVE 25X3/4"

RIFENG GAS TAILS AND BARBS

RSCA16CU3/8	RIFENG COPPER S/ADAPT 16MM X 9.52MMCU
RCSA16CU1/2	RIFENG COPPER S/ADAPT 16MM X12.7MMCU
RCSA16CU15	RIFENG COPPER S/ADAPT 16MM X15/20CU
RCSA25CU15	RIFENG COPPER S/ADAPT 25MM X15/20CU

RIFENG COPPER TAIL

RCSA16CU3/8'TAIL	RIFENG COPPER S/ADAPT 16MM X 9.52MMCU TAIL
RCSA16CU1/2'TAIL	RIFENG COPPER S/ADAPT 16MM X 12.7MMCU TAIL
RCSA16CU15TAIL	RIFENG COPPER S/ADAPT 16MM X 15CU TAIL
RCSA20CU15TAIL	RIFENG COPPER S/ADAPT 20MM X 15CU TAIL
RCSA20CU20TAIL	RIFENG COPPER S/ADAPT 20MM X 20CU TAIL
RCSA25CU15TAIL	RIFENG COPPER S/ADAPT 25MM X 15CU TAIL
RCSA25CU20TAIL	RIFENG COPPER S/ADAPT 25MM X 20CU TAIL
RCSA25CU25TAIL	RIFENG COPPER S/ADAPT 25MM X 25CU TAIL

RIFENG GAS TAG

RGASTAG	RIFENG GAS LABEL TAG S/S

MANIFOLD - RED

RWMANR	RIFENG WATER MANIFOLD M&F 1' X 3/4' 4 OUTLET - RED

MANIFOLD - BLUE

RWMANB	RIFENG WATER MANIFOLD M&F 1' X 3/4' 4 OUTLET - BLUE

MANIFOLD OUTLET

RWMAN2016	RIFENG WATER MANIFOLD M&F 3/4' X 1/2' OUTLET - NO HANDLE

MANIFOLD CONNECTORS

RWMANC1615	MANIFOLD WATER CONNECTOR 16mm PIPE X 15mm BSP
RWMANC1620	MANIFOLD WATER CONNECTOR 16mm PIPE X 20mm BSP
RWMANC2020	MANIFOLD WATER CONNECTOR 20mm PIPE X 20mm BSP

Underfloor Heating

SPK - Rifeng MLP piping systems are a perfect solution for Underfloor heating, as 16mm MLP Pex-Al-Pex provide a perfect oxygen barrier and is easy to install as the pipe holds it's shape when bent. The Aluminium middle layer provides a great heat transfer rate, superior to standard single layer Pex pipes.

SPK also supply EVOH oxygen barrier underfloor pipe 16 & 20mm.

SPK Industries can provide manifolds and accessories to complete your underfloor heating system.

Passive fire protection and Understanding Fire Ratings

SPK & Rifeng have prepared an information sheet on Fire Ratings in building construction as they pertain to Rifeng Gas and Water PEX/AL/PEX installations.
Reference can be made to the full transcripts of the Fire Test reports to ensure that fire rated silicone and fire collars are suitable for use with our products to achieve the fire rating that is required for the nominated building specification.

Some basic Information

a. A Fire Rated Duct is exactly that. It is generally a riser duct that has been constructed to achieve exceed the fire rating required for that situation.

b. All other riser ducts have been constructed to achieve a specific fire rating for the building and Fire Collars or Fire Rated silicone or similar will be required to be used for each service penetrating a wall or floor.

c. (Floor) Riser Ducts are typically required to have a 4 hour fire rating.

d. Walls are typically required to have a 2 hour fire rating.

Under the NZ Building Code requirements for Passive fire proteciton, it requires fire stopping of service penetrations to be tested to Australian Standards.

Australian Standards (AS1530-4) for Fire Rating and the Building Code of Australia
AS1530-2005 is THE Australian Standard for Methods for fire tests on building materials, components and structures. The objective of the standard is to provide building designers, manufacturers, test laboratories and regulatory authorities with a set of uniform requirements for heating conditions, test procedures, and criteria for the determination of fire resistance of an element of building construction. This Standard is referenced in the Building Code of Australia and New Zealand and Part 4 of this Australian Standard details the Fire-resistance testing of elements of Construction. This covers testing of fire resistance that related to installation of pex systems in buildings includling Rifeng Gas and Rifeng Water PEX/AL/PEX systems.
There has been comprehensive testing of products with fire collars and fire rated silicones conducted in accordance with this Standard. This information is available on request.

Approvals


CERTIFICATE OF CONFORMITY

SAI Global hereby grants:

Foshan Rifeng Enterprises Co Ltd

Watermark Certificate of Conformity - Level 1

SAI GLOBAL


CERTIFICATE OF CONFORMITY

SAI Global hereby grants:

Foshan Rifeng Enterprises Co Ltd

Watermark Certificate of Conformity - Level 1

SAI GLOBAL


STANDARDSMARK LICENCE

SAI Global hereby grants:

Foshan Rifeng Enterprises Co Ltd

StandardsMark Licence

SAI GLOBAL

FAQS

Q: **Can Rifeng Pipe be installed in direct sunlight?**
A: No. UV Radiation can damage plastic pipes and all pipes should have sleeving or insulation applied if pipe is installed outdoors.

Q: **Can Rifeng universal fittings be used for gas and water?**
A: Yes. All Rifeng universal fittings are approved for use on potable water and gas installations

Q: **Can Rifeng Gas pipes be installed in concrete or under buildings?**
A: Yes. Rifeng gas pipes may be installed in concrete or under building in a continous run and without joints or fittings in accordance with the building code.

Q: **How close can Rifeng pipe be installed to high temperature heat sources such as heating appliances and flues?**
A: Rifeng Pipe should be installed at best 500mm away from the heat source.

Q: **Can Rifeng pipe be installed alongside recessed down light fittings?**
A: Yes. As long as it is kept a minimum of 300mm away from the fitting.

Q: **Do you need to allow for expansion of pipe?**
A: Yes. Always allow for expansion in all pipe runs especially in hot water lines (refer to expansion & contraction graph page 5.)

Q: **Should Rifeng pipe be reamed before fittings are connected?**
A: Yes. Use the correct Rifeng reaming/bevelling tool to ensure the pipe is bevelled and rounded to protect the 'O' Rings during installation.

Q: **What test pressure should Rifeng Water Pipe be tested to?**
A: Test Rifeng water systems at 1500kPa for 30 minutes, check crimps visually and after testing to ensure crimps are complete and no leaks have occurred.

Q: **What is the maximum pressure Rifeng Gas pipe can be operated at for Nat Gas and LPG?**
A: 70kPa, All macro-composite MLP proprietary gas pipe system are limited to 70kPa in accordance with table 4.1 gas code AS/NZ35601.

WARRANTY STATEMENT

SPK – Rifeng Pex and Multilayer Systems

SPK – Rifeng piping systems supplied by SPK industries LTD comply with AS2492, AS2537 & AS4176 and carry a 25 year warranty

The Rifeng Group has established itself over the past 20 years as a world leader in Plumbing, Gas and Heating systems and now is the biggest plastic pipe supplier in the world, with the capacity to produce 1.8 million metres of Pex, Multilayer and PPR pipes and 1.3 million fittings per day.

Rifeng hold certificates for over 60 certifying institutes internationally including the USA, Germany, Great Britain, Holland, Australia to name a few.

The 25 year warranty applies to all SPK - Rifeng piping systems and system components distributed by SPK nationally.

SPK Industries or Rifeng is unable to warrant in any way the following aspects of any Rifeng installation.

- Workmanship and or installation practices.
- The environment in which the tube is installed.
- The system of which the pipework is a part.
- Against corrosive environments or liquids which may be transported by or stored within the pipework.
- Or the effect that any of the above aspects may have on the system.

Care should be taken to ascertain if a potentially corrosive environment is present, either externally or from the fluid transported in the system and if so technical assistance should be sought from SPK Industries LTD before installation.

The universal O Ring on Rifeng DZR fittings is designed for use with Plumbing and Gas installations. It is suitable for both Natural Gas and LPG and for cold and hot water systems where a tempering valve is fitted and system will not run at over a maximum temperature of 75˚C

SPK
Industries

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SPK
Industries

Complete Solutions. For your total piping solutions call **(09) 271 3720**