
GASTITE



GAS PIPING SYSTEM

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HIGH INTEGRITY, HIGH PERFORMANCE GAS PIPING SYSTEM

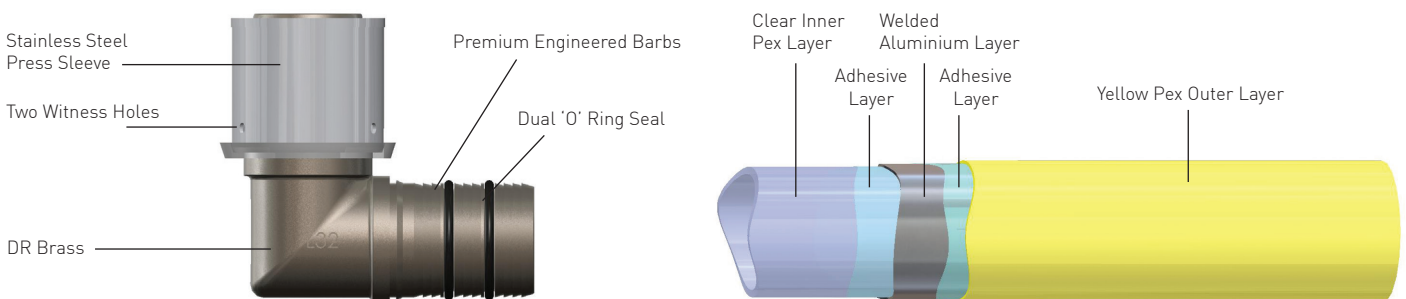
GASTITE from LEAP is a composite piping system designed to offer installers and end users the benefits of both metal and plastic. GASTITE pipe is a five layer system with an inner layer of cross-linked polyethylene (PE-X), then an adhesive layer, a welded aluminium layer, another adhesive layer and finished outer layer of cross linked polyethylene (PE-X). GASTITE fittings are manufactured from DR brass. The stainless steel press ring has two witness holes and is fitted to the body of the fitting using a plastic retainer. Sealing against the escape of gas are two o-rings designed specifically for use with gas. All pipe and fittings are manufactured using the latest extrusion, moulding and machining techniques to ensure a perfect connection every time, providing you with a system that is superior than most conventional pipe systems with a design life in excess of 50 years.

GASTITE FEATURES

Corrosion free	Wide range of compact DR brass fittings
50 Year design life	Pipe fittings and tools compatible with WATERTITE
Light, strong and robust	Quality appraised
Double O-ring seal	Manual and power tools for easy and quick installation

KEY INFORMATION

- GASTITE piping systems should only be installed by a qualified and licensed gasfitter.
- GASTITE should always be installed in accordance with the New Zealand/Australian Building Code and Gas Installation Code (AS/NZS 5601) and any local gas authority requirements.
- GASTITE should NOT be used when exposed to petroleum solvents.
- GASTITE piping must be shielded or painted to protect from UV light.
- GASTITE is manufactured and certified to AS4176.
- GASTITE pipes must be bent using appropriate bending tools.
- GASTITE pipe must be reamed and bevelled using appropriate reaming tools.
- GASTITE pipe and fittings must always be installed using a suitable tool.



GASTITE pipe and fittings, installed by a licensed gasfitter in accordance with the current published installation guidelines, are warranted against material or manufacturing defects for a period of 25 years.

GASTITE is manufactured to comply with AS4176 and is approved for use in Australia subject to the installation requirements outlined in the Building Code of Australia and any local gas authority requirements.



GASTITE ASSEMBLY

PIPE CONNECTION



Use only purpose designed pipe cutters. Measure and cut the pipe. Ensure pipe end is square and free from burrs. An uneven or jagged cut may result in an improper connection.



The pipe end must be reamed and bevelled using an appropriate reamer to ensure a round and smooth pouring angle.



Insert the fitting fully into the pipe making sure the pipe can be seen through both witness holes in the press ring. NOTE – If an incorrect joint is made, the defective joint must be removed and replaced with a new fitting.



MANUAL TOOL. Position the tool so the press sleeve is completely covered and the tongs are at 90° to the fitting or press sleeve. Close the handles completely so the pressing tongs are completely closed over the press sleeve.



BATTERY TOOL. Position the tool so the press sleeve is completely covered and the tongs are at 90° to the fitting or press sleeve. Operate the power switch until the pressing tongs are completely closed and a click is sounded by the tool.

PIPE BENDING

GASTITE pipe can be bent easily – care should be taken not to kink or damage the pipe during these operations. Pipe must always be bent BEFORE pressing of fittings. The recommended bending radius using hand or tool bending is shown below:

MINIMUM HAND BENDING RADIUS		MINIMUM TOOL BENDING RADIUS	
PIPE	RADIUS	PIPE	RADIUS
16mm	80mm Minimum	16mm	60mm Minimum
20mm	100mm Minimum	20mm	80mm Minimum
25mm	200mm Minimum	25mm	120mm Minimum
32mm	350mm Minimum	32mm	140mm Minimum

IMPORTANT NOTE: If pipe radius required is less than the above limits, use an elbow fitting. If for any reason the pipe is kinked or damaged, the faulty section shall be replaced. Never apply bending forces to a pressed fitting.

FUTURE EXTENSION

System should be designed to allow for future extensions in accordance with AS/NZS 5601.

CLIPPING PIPE

All GASTITE pipe should be retained in position by clips at intervals complying with AS/NZS 5601.

TESTING

All installations should be tested as per the requirements of AS/NZS 5601. All joints and fittings should be inspected for leaks.

COMPONENT SELECTOR



Pipe, Straight Length

16mm – 5m Length	PLG16.05
20mm – 5m Length	PLG20.05
25mm – 5m Length	PLG25.05
32mm – 5m Length	PLG32.05



Centre Reduced Tee

20mm x 20mm x 16mm	RT202016
25mm x 25mm x 16mm	RT252516
25mm x 25mm x 20mm	RT252520
32mm x 32mm x 20mm	RT323220
32mm x 32mm x 25mm	RT323225



Pipe, Coil

16mm – 25m Coil	PCG16.25
20mm – 25m Coil	PCG20.25
25mm – 25m Coil	PCG25.25
32mm – 25m Coil	PCG32.25



End Reduced Tee

20mm x 16mm x 20mm	RT201620
25mm x 20mm x 25mm	RT252025
32mm x 25mm x 32mm	RT322532



Straight Connector

16mm x 16mm	SC1616
20mm x 20mm	SC2020
25mm x 25mm	SC2525
32mm x 32mm	SC3232



Centre/End Reduced Tee

20mm x 16mm x 16mm	RT201616
25mm x 20mm x 20mm	RT252020



Straight Reducer

20mm x 16mm	SR2016
25mm x 16mm	SR2516
25mm x 20mm	SR2520
32mm x 20mm	SR3220
32mm x 25mm	SR3225



Female Threaded Tee

32mm x 32mm x 1" FI	FTT32.25
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Equal Bend

16mm x 16mm	EB1616
20mm x 20mm	EB2020
25mm x 25mm	EB2525
32mm x 32mm	EB3232



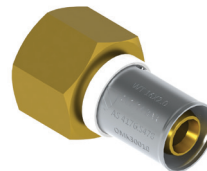
Male Adaptor

16mm MI x 1/2" BSP MI	MA16.15
20mm MI x 1/2" BSP MI	MA20.15
20mm MI x 3/4" BSP MI	MA20.20
25mm MI x 3/4" BSP MI	MA25.20
25mm MI x 1" BSP MI	MA25.25
32mm MI x 3/4" BSP MI	MA32.20
32mm MI x 1" BSP MI	MA32.25



Equal Tee

16mm x 16mm x 16mm	ET161616
20mm x 20mm x 20mm	ET202020
25mm x 25mm x 25mm	ET252525
32mm x 32mm x 32mm	ET323232



Female Adaptor

16mm FI x 1/2" BSP FI	FA16.15
20mm FI x 1/2" BSP FI	FA20.15
20mm FI x 3/4" BSP FI	FA20.20
25mm FI x 1/2" BSP FI	FA25.15
25mm FI x 3/4" BSP FI	FA25.20
32mm FI x 1/2" BSP FI	FA32.15
32mm FI x 3/4" BSP FI	FA32.25

COMPONENT SELECTOR



Male Wingback Elbow

20mm x 1/2" BSP MI	MWE20.15
20mm x 3/4" BSP MI	MWE20.20
25mm x 3/4" BSP MI	MWE25.20
20mm x 1/2" BSP MI EXT 180	MWE20.15 EXT 180
20mm x 3/4" BSP MI EXT 180	MWE20.20 EXT 180



Pipe Clip

16mm	GT16
20mm	GT20
25mm	GT25
32mm	GT32



Female Wingback Elbow

16mm x 1/2" BSP FI	FWE16.15
20mm x 1/2" BSP FI	FWE20.15
20mm x 3/4" BSP FI	FWE20.20
25mm x 3/4" BSP FI	FWE25.20



Plastic Pipe Reamer

16mm, 20mm, 25mm	PPR16.20.25
20mm, 25mm, 32mm	PPR20.25.32



Male Bend Adaptor

20mm x 3/4" BSP MI	MB20.20
25mm x 3/4" BSP MI	MB25.20
32mm x 1" BSP MI	MB32.25



Pipe Cutter

Pipe Cutter 32	PC16.32
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Female Bend Adaptor

20mm x 3/4" BCP FI	FB20.20
25mm x 1" BSP FI	FB25.25
32mm x 1" BSP FI	FB32.25



Pipe Bending Tool

16 – 32mm	PBT16.32
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Flared Copper Connector

20mm x 1/2" FC	FCC20.15
20mm x 3/4" FC	FCC20.20
25mm x 1" FC	FCC25.25
32mm x 1 3/4" FC	FCC32.32



Ratchet Pipe Cutter

Ratchet Pipe Cutter 40	RPC16.40
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Blanking Plug

16mm	BP16
20mm	BP20
25mm	BP25
32mm	BP32



Manual Pressing Tool

16 – 32mm	MCT16.32
16 – 32mm with case	MCT16.32WC
Premium 16 – 32mm	PZDK-11



Press Sleeve

16mm	PS16
20mm	PS20
25mm	PS25
32mm	PS32



Battery Operated Pressing Tool

16 – 32mm	BPTL16.32
16 – 40mm	BPTL16.40

PIPE SIZING TABLE

NATURAL GAS - (METER PRESSURE 1.10KPA) PRESSURE DROP OF 0.075KPA NORMAL GAS FLOW THROUGH PEX / AL / PEX COMPOSITE PIPE CRIMPED FITTINGS (MJ /H)

Norm Size (MM)	Mean ID	2	4	6	8	10	12	14	16	18	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	86	59	47	41	36	33	30	28	26	0.00	0	0.00	0	18
20	16	183	126	101	86	77	69	64	59	56	0.00	0	0.00	0	18
25	20	328	226	181	155	137	125	115	107	100	0.00	0	0.00	0	18
32	26	653	449	361	309	273	248	228	212	199	0.00	0	0.00	0	18
Norm Size (MM)		20	25	30	35	40	45	50	55	60	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	25	22	20	18	17	16	15	14	14	0.00	0	0.00	0	30
20	16	53	47	42	39	36	34	32	30	29	0.00	0	0.00	0	30
25	20	94	84	76	70	65	61	58	55	52	0.00	0	0.00	0	30
32	26	188	167	151	139	129	121	114	109	104	0.00	0	0.00	0	30

NATURAL GAS - (METER PRESSURE 1.25KPA) PRESSURE DROP OF 0.12KPA NORMAL GAS FLOW THROUGH PEX / AL / PEX COMPOSITE PIPE CRIMPED FITTINGS (MJ /H)

Norm Size (MM)	Mean ID	2	4	6	8	10	12	14	16	18	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	111	76	61	52	46	42	39	36	34	0.00	0	0.00	0	18
20	16	236	162	130	111	99	89	82	77	72	0.00	0	0.00	0	18
25	20	423	291	234	200	177	161	148	137	129	0.00	0	0.00	0	18
32	26	842	579	465	398	353	320	294	273	257	0.00	0	0.00	0	18
Norm Size (MM)		20	25	30	35	40	45	50	55	60	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	32	28	26	24	22	21	19	18	18	0.00	0	0.00	0	30
20	16	68	60	54	50	47	44	41	39	37	0.00	0	0.00	0	30
25	20	122	108	98	90	84	79	74	70	67	0.00	0	0.00	0	30
32	26	242	215	195	179	167	156	148	140	134	0.00	0	0.00	0	30

NATURAL GAS - (METER PRESSURE 2.75KPA) PRESSURE DROP OF 1.63KPA NORMAL GAS FLOW THROUGH PEX / AL / PEX COMPOSITE PIPE CRIMPED FITTINGS (MJ /H)

Norm Size (MM)	Mean ID	2	4	6	8	10	12	14	16	18	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	455	312	251	215	190	172	159	148	138	0.00	0	0.00	0	18
20	16	967	665	534	457	405	367	337	314	295	0.00	0	0.00	0	18
25	20	1736	1193	958	820	727	659	606	564	529	0.00	0	0.00	0	18
32	26	3455	2375	1907	1632	1447	1311	1206	1122	1053	0.00	0	0.00	0	18
Norm Size (MM)		20	25	30	35	40	45	50	55	60	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	131	116	105	97	90	84	80	76	72	0.00	0	0.00	0	30
20	16	278	247	223	206	191	179	169	161	154	0.00	0	0.00	0	30
25	20	500	443	401	369	343	322	304	289	276	0.00	0	0.00	0	30
32	26	994	881	798	734	683	641	606	575	549	0.00	0	0.00	0	30

LPG - (METER PRESSURE 2.75KPA) PRESSURE DROP OF 0.25KPA LPG GAS FLOW THROUGH PEX / AL / PEX COMPOSITE PIPE CRIMPED FITTINGS (MJ /H)

Norm Size (MM)	Mean ID	2	4	6	8	10	12	14	16	18	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	283	194	156	134	118	107	99	92	86	0.00	0	0.00	0	18
20	16	602	414	332	284	252	228	210	195	183	0.00	0	0.00	0	18
25	20	1080	743	596	510	452	410	377	351	329	0.00	0	0.00	0	18
32	26	2150	1478	1187	1016	900	816	750	698	655	0.00	0	0.00	0	18
Norm Size (MM)		20	25	30	35	40	45	50	55	60	Corrections (+) = fitting x 2.50m	2.5	%	Fittings	Mtrs
16	12	81	72	65	60	56	53	50	47	45	0.00	0	0.00	0	30
20	16	173	153	139	128	119	112	105	100	96	0.00	0	0.00	0	30
25	20	311	276	250	230	214	200	189	180	172	0.00	0	0.00	0	30
32	26	619	548	497	457	425	399	377	358	341	0.00	0	0.00	0	30

OTHER LEAP SYSTEMS



MANIFOLD PLUMBING SYSTEM

MANIFLOW saves energy and conserves water by having a dedicated pipeline from a manifold near the hot water cylinder to each tap or fixture in the house. Hot water goes straight where it's needed without sitting round cooling in the big 'feeder' pipes needed to serve multiple outlets.

Less energy and water is wasted, as hot water arrives faster at the tap. Flexible and non-metallic pipes result in a quiet and efficient plumbing system that doesn't suffer corrosion, scaling or microbial build-up.



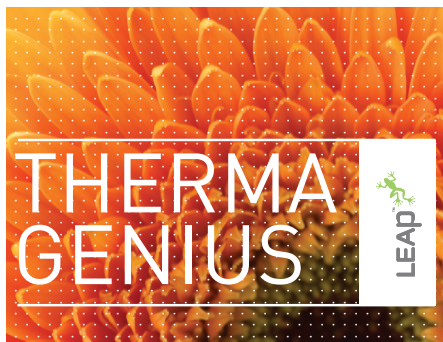
FLEXIBLE PUSH-FIT PLUMBING SYSTEM

Hep20 has evolved over 20 years to become the leading flexible push-fit plumbing system for hot and cold water. Flexible polybutylene in conjunction with straight coils enables pipe to be cabled into position, meaning fewer joints and minimised installation and alteration costs.



HOT AND COLD PLUMBING SYSTEM

WATERTITE is a high integrity and high performance piping system designed to offer installers the benefits of a high temperature and a flexible non-metallic pipe. WATERTITE pipe is manufactured using crosslinking technology first developed in Europe and performs in ways that provide superior reliability, durability and safety.



HEAT PUMP WATER HEATING SYSTEM

THERMAGENIUS extracts renewable energy stored in the air to heat water. THERMAGENIUS is not dependent on weather and operates throughout the year from inside or outside your home. With high efficiencies, payback on a THERMAGENIUS can be very quick. Unobtrusive, easy to install and cheap to run, these units are a great way to provide hot water for the home. The only energy used is electricity to power the pumps but delivering 3 or 4 times as much energy.



HOME FIRE SPRINKLER SYSTEM

BLAZESTOP is an affordable sprinkler system linked to a domestic water supply, putting the reassurance of sprinkler protection within reach of private homeowners. Designed especially for the home environment, BLAZESTOP uses sprinkler heads concealed in the ceiling. Flexible, concealed piping makes retrofitting into homes easy and cost-effective. Made from durable polybutylene, it isn't affected by scaling, corrosion, or microbiological growth and doesn't transmit noise.



HYDRONIC HEATING SYSTEM

TERRATHERM is a highly effective and unobtrusive way to radiate comfortable, healthy warmth through your home. TERRATHERM pipes in heat via hot water circulated through flexible underfloor pipes. The system delivers warmth that starts at ground level then slowly rises. TERRATHERM is built-in, involving no unsightly heaters, panels or vents. Its zone-by-zone controls also let you manage your home heating more efficiently, ensuring heat goes where and when it's needed.

FOR MORE INFORMATION ABOUT GASTITE CALL

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