

Product specifications

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THE PIPING SYSTEM

The Mirador piping system consists of piping particularly tailored for small diameters. The pipes and fittings are made from glassfiber reinforced vinylester/phenolics and are glued together by using a patented splicing technology. The splicing method is simple, safe and demands a minimum of tools and effort.

The pipe is standardised to the same outside diameter as steel piping of compatible pressure rating, allowing for a flexible combination with metal piping systems without any use of flanges or similar fittings.

The system is designed for a pressure rating of 20 Bar and a maximum temperature of 80 degrees Celsius.

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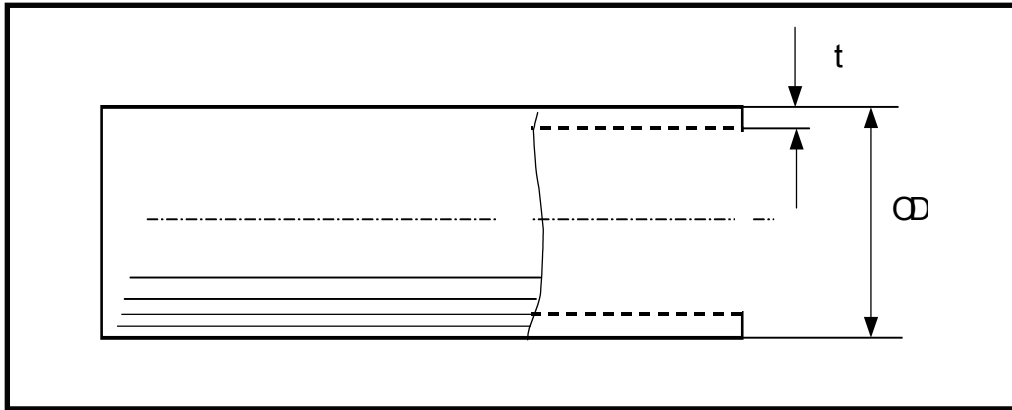
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PIPING AND FITTING DIMENSIONS

Piping dimensions



	1"	1 ½"	2"	3"	4"
T (mm)	4,0	4,0	4,4	5,0	5,0
OD (mm)	33,4	48,3	60,8	(*) 88,9	(*) 114,3
Weight (kg/m)	0,610	1,050	1,480	2,2	2,7

(*) Shaved end dimension.

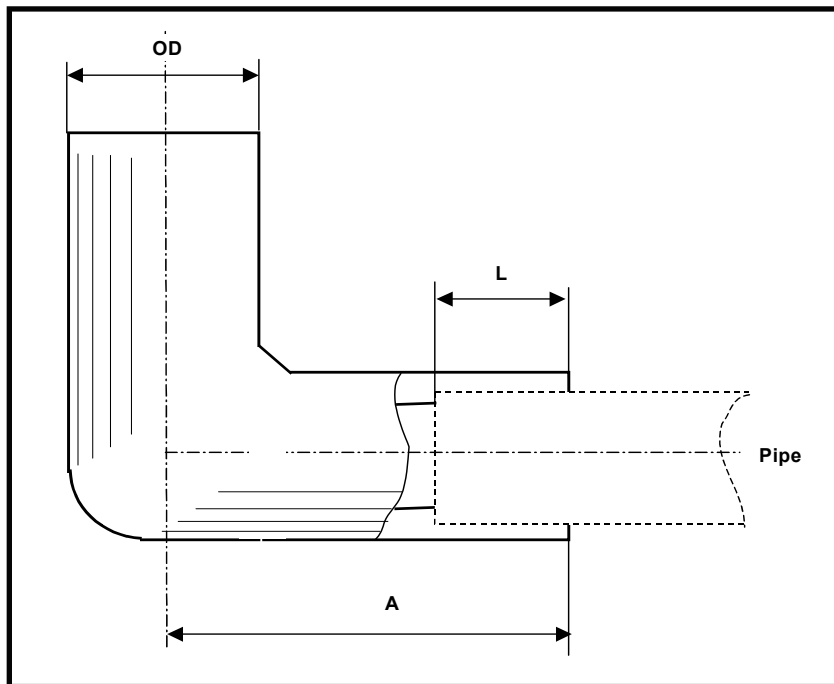
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Elbow, 90 degrees dimensions



	1"	1 ½"	2"	3"	4"
OD (mm)	49	67,6	79,6	106	132
A (mm)	70	90	100	205	240
L (mm)	40	45	50	60	70
Weight (kg)	0,244	0,470	0,698	1,1	1,5

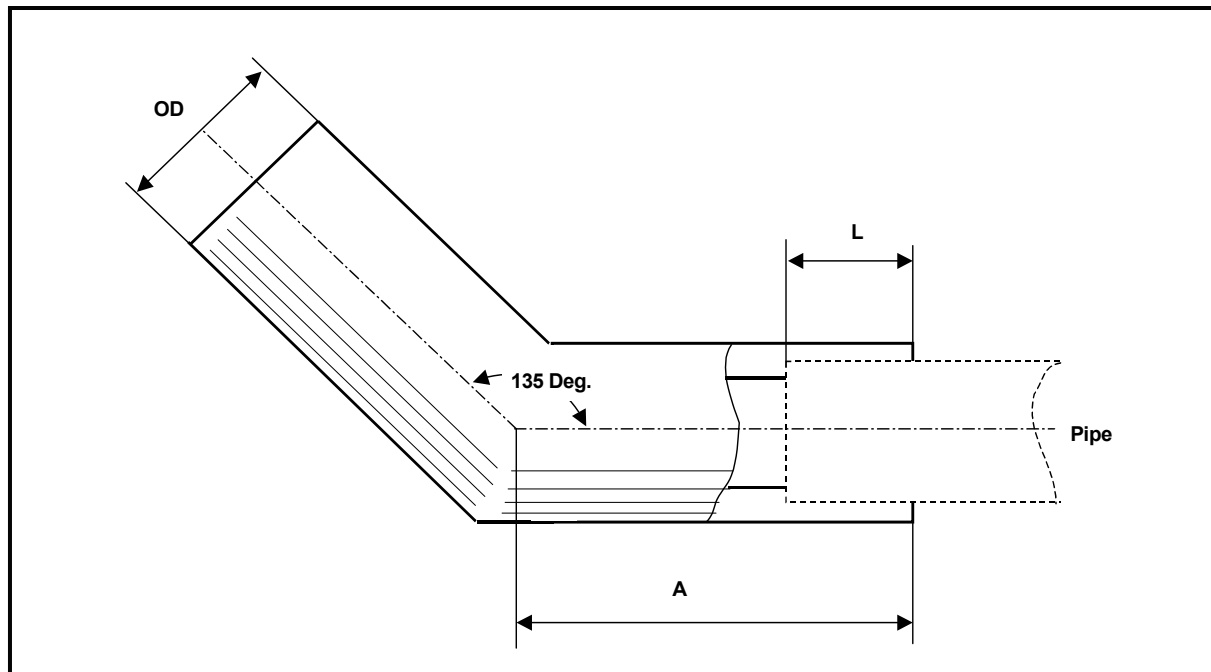
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Elbow, 45 degrees dimensions



	1"	1 1/2"	2"	3"	4"
OD (mm)	49	67,6	79,6	106	132
A (mm)	70	90	100	205	240
L (mm)	40	45	50	60	70
Weight (kg)	0,247	0,477	0,706	0,6	0,8

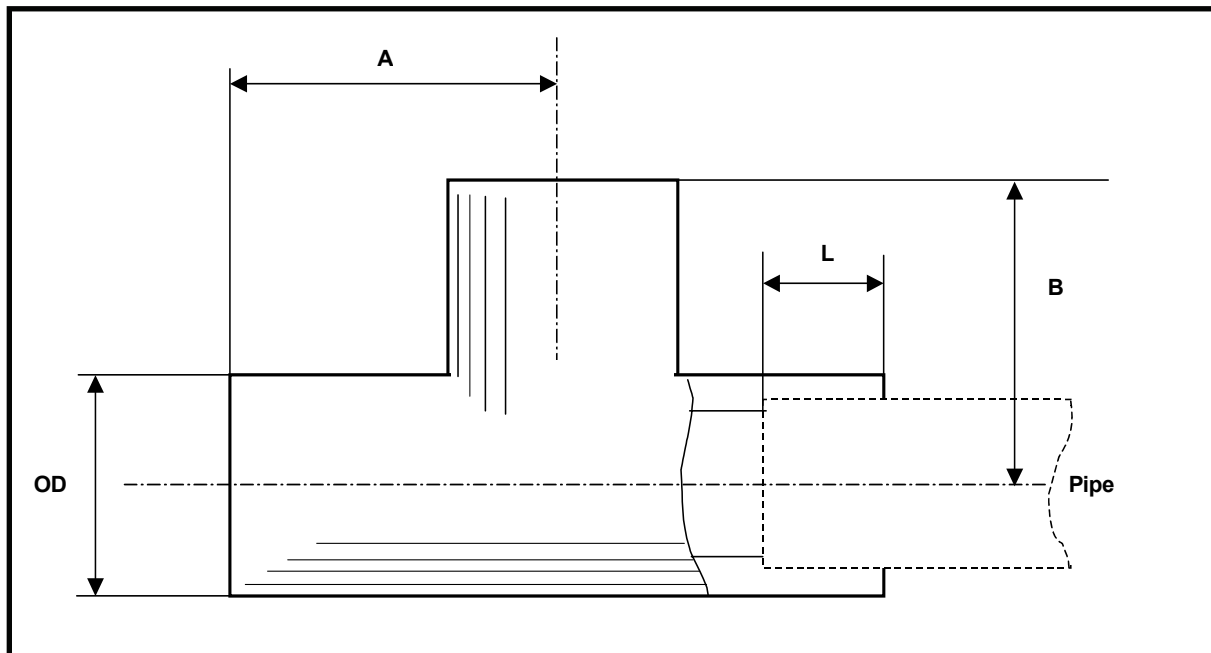
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Tee dimensions



	1"	1 1/2"	2"	3"	4"
OD (mm)	49	67,6	79,6	106	132
A (mm)	70	90	100	145	170
B (mm)	70	90	100	145	170
L (mm)	40	45	45	60	70
Weight (kg)	0,321	0,620	0,918	1,8	2,2

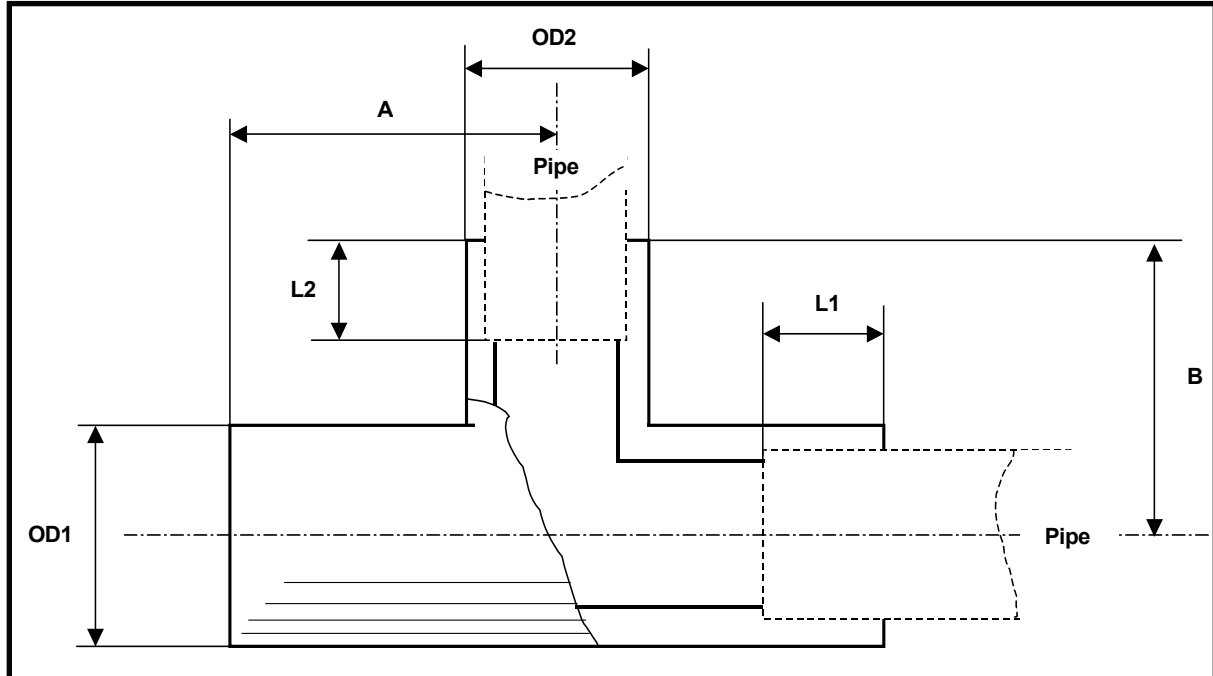
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Reducing Tee dimensions



	1 ½" – 1"	2" – 1"	2" – 1 ½"	3" - 2"	4" - 3"
OD1 (mm)	67,6	79,6	79,6	106	132
OD2 (mm)	49	49	67,6	77	106
A (mm)	90	100	100	145	170
B (mm)	70	70	90	130	155
L1 (mm)	45	50	50	60	70
L2 (mm)	40	40	45	45	60
Weight (Kg)					

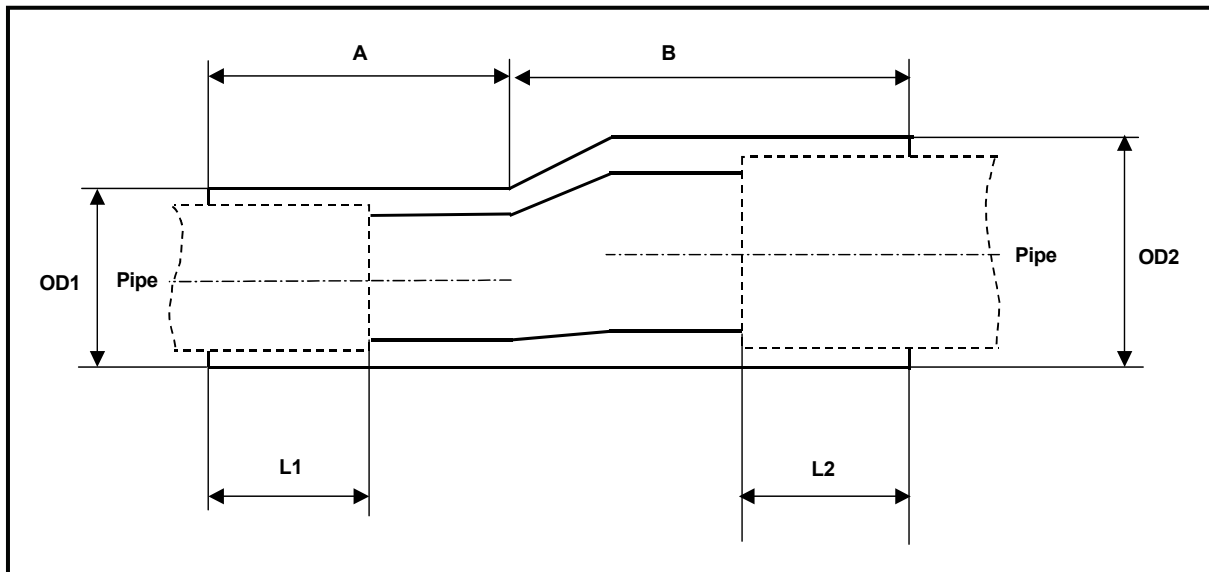
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Reducer dimensions



	1 ½" – 1"	2" – 1 ½"	2" – 1"	3" – 2"	4" – 3"
	(*)	(*)	(*)	(**)	(**)
OD1 (mm)	49	67,6	49	77	106
OD2 (mm)	67,6	79,6	79,6	106	132
A (mm)	70	90	70	70	85
B (mm)	90	100	100	160	140
L1 (mm)	40	45	40	45	60
L2 (mm)	45	50	50	60	70
Weight (Kg)					

(*) Eccentric reducer.

(**) Centric reducer.

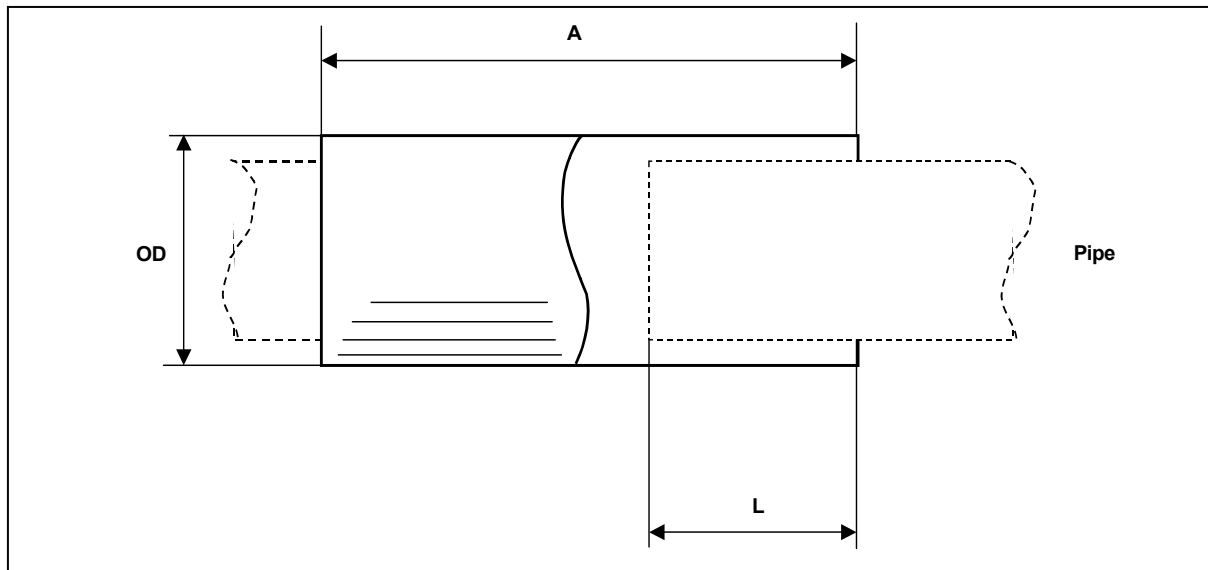
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Straight coupling dimensions



	1"	1 ½"	2"	3"	4"
A (mm)	140	180	200	150	180
OD (mm)	49	67,6	79,6	105	130
L (mm)	40	45	50	60	70
Weight (kg)	0,246	0,475	0,704	0,5	

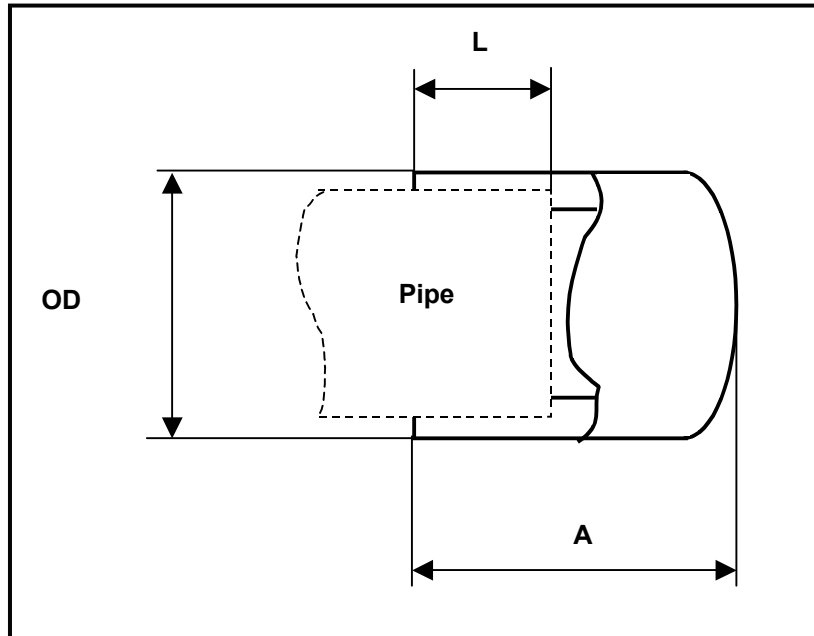
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Endcap dimensions



	1"	1 1/2"	2"	3"	4"
OD (mm)	49,0	67,6	79,6	106	132
L (mm)	40	45	50	60	70
A (mm)	70	90	100	120	140
Weight (Kg)					

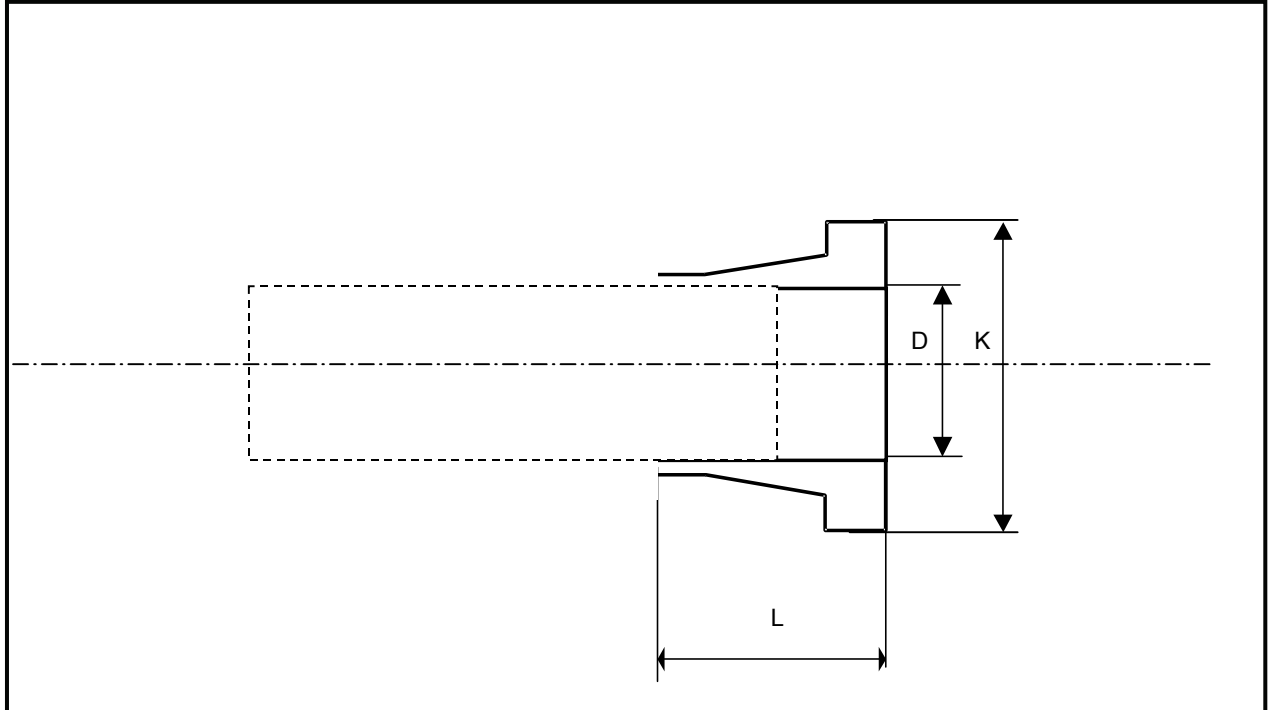
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Collar for loos flange



	1"	1 ½"	2"	3"	4"
k (mm)	68	88	102	138	158
D (mm)	25	40	50	80	100
L (mm)	58	58	90	110	90
Weight (Kg)					

GRP loose flanges can be delivered in accordance with appropriate standard. Steel loose flanges according to SFS 2180 (DIN2673) can also be used.

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INSULATION

The insulation concept

All Mirador piping can be insulated to meet our customer's needs. The insulation can be tailored to meet any requirements.

Pre-insulated lengths of pipes or prefabricated spools can be supplied to fabrication site for assembly or the pipes can be insulated on site or a combination of both, all in order to obtain the most cost efficient solution.

Services

The insulation concept is designed to serve different purposes such as:

- Heat conservation
- Cold preservation
- Condensate prevention
- Frost prevention

Frost prevention will include use of heat tracing. The cables will be pulled through an internal duct, inside the insulation, and only a minimum amount of joining will be required.

Insulation thickness

The insulation thickness is 30 mm for all pipes up to 4". This will in most cases meet our customers requirements. However, the insulation thickness can be calculated and tailored by Mirador to meet any special requirements.

Supporting

An insulated pipe with a jacket forms a hard surface. The support can therefore be clamped directly onto the jacket.

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Insulation classes

Mirador supplies two classes of insulation.

Class 1 is designed to meet common requirements to piping insulation with exception of fire requirements. This insulation is combustible and should not be used in areas where special fire requirements apply.

Class 2 is designed to meet common requirements to piping insulation. **This insulation is in addition non-combustible** and can therefore be used in areas where special fire requirements apply.

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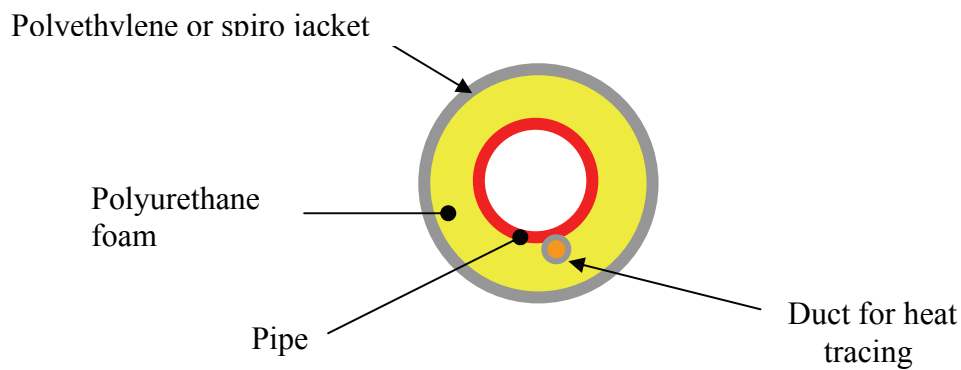
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Class 1

In this class the Mirador piping system is insulated with polyurethane foam, which is injected between the pipe and a polyethylene jacket. This ensures a robust surface of the insulated pipe. This insulation system is particularly suitable for pipes in buried service but can also be used in areas where there are no special requirements to fire-resistance.

The pipe can be supplied with a special duct for heat tracing where required. Mirador can also supply heating cables and perform necessary heat-loss calculations.



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Class 2

Class 2 insulation consist of foamglas®, made by Pittsburgh Corning, attached directly onto the Mirador pipe. The mantling material will be of Terrostat, which is another Pittsburgh Corning product. Both the adhesive and mantling will be of the same material. This insulation system is designed to meet fire resistance requirements, as the foamglas® are non-combustible.

The pipe can be supplied with a special duct for heat tracing where required. Mirador can also supply heating cables and perform necessary heat-loss calculations.

