

Flexalen[®] 600 Water

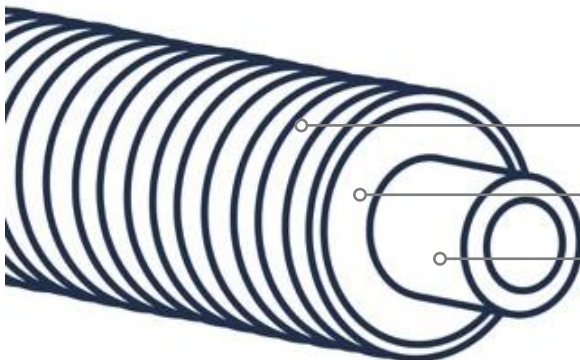
Pre-insulated piping system by Thermaflex[®]

Extremely flexible and easy to install pre-insulated pipe system for domestic water applications



Benefits

- Fast and easy installation
- Safest choice with homogeneous welding, one material, for increased reliability
- Large network capacity with full compatibility with Flexalen[®] PU SL with service pipes up to OD315mm
- The only Cradle to Cradle[™] certified pre-insulated pipe system in the world
- Thermaflex service: Support with integrated network design, calculation tools, training and on-site support



Design

Polyethylene corrugated pipe, PE
Flexibility and mechanical protection

Polyolefin foam
Closed-cell, CFC-free

Polybutene service pipe, PB-1

Applications

- All domestic hot- and cold-water applications
- Drinking water
- Geothermal water

Technical Properties

Flexalen[®] 600 is a pre-insulated flexible plastic pipe system produced conform the European standard EN15632-1,3 and KIWA system certified as well as third-party controlled according BRL-K17401.

PB-1 service pipe (EN-ISO 15876)

Max. service temperature	95°C
Continuous service temperature	80°C
Max. operating pressure	8bar*(95°C)

*depending on the diameter

Thermal Insulation

Polyolefin foam
Closed-cell structure, CFC-free
Water vapor diffusion $\mu \geq 3,500$

Flexalen® 600 Heat losses






Heat loss q [W/m] for one Single line							
Flexalen® 600 Single line	Operating temperature T [°C]						
	20°C	30°C	40°C	50°C	60°C	70°C	80°C
25 / 90	1.390	2.824	4.302	5.822	7.385	8.990	10.638
32 / 90	1.713	3.479	5.297	7.167	9.088	11.061	13.084
40 / 90	2.168	4.401	6.698	9.058	11.480	13.966	16.513
40 / 125	1.678	3.405	5.181	7.005	8.877	10.796	12.763
50 / 90	2.965	6.014	9.145	12.358	15.651	19.024	22.476
50 / 125	2.072	4.203	6.393	8.641	10.947	13.311	15.732
50 / 160	1.730	3.506	5.327	7.193	9.105	11.060	13.060
63 / 125	2.754	5.583	8.488	11.468	14.521	17.647	20.846
63 / 160	2.109	4.273	6.491	8.764	11.090	13.470	15.904
75 / 125	3.673	7.443	11.307	15.265	19.315	23.458	27.690
75 / 160	2.521	5.106	7.756	10.470	13.248	16.089	18.992
90 / 160	3.204	6.489	9.855	13.299	16.823	20.425	24.104
110 / 200	3.386	6.850	10.393	14.012	17.708	21.479	25.326
125 / 200	4.114	8.323	12.624	17.018	21.503	26.078	30.743

Calculation parameter

λ_{soil} :	1.00 W/m·K
R soil surface to ambient air:	0.0685 m ² ·K/W
T _{soil} :	10.0 °C
Soil covering:	0.8 m

The heat loss characteristics are in accordance with the European standard for flexible heating pipes systems EN15632. During the expected lifetime of the product these values will increase by 7-10 %.

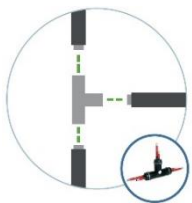
Availability - Domestic Water

Single line			
Product code	Dimension	Service pipe OD x s [mm]	Jacket pipe OD [mm]
1000-090025-001	25 / 90	25 x 2.3	90
1000-090032-001	32 / 90	32 x 2.9	90
1000-090040-001	40 / 90	40 x 3.7	90
1000-125040-001	40 / 125	40 x 3.7	125 
1000-090050-001	50 / 90	50 x 4.6	90
1000-125050-001	50 / 125	50 x 4.6	125 
1000-160050-001	50 / 160	50 x 4.6	160 
1000-125063-001	63 / 125	63 x 5.8	125
1000-160063-001	63 / 160	63 x 5.8	160 
1000-125075-001	75 / 125	75 x 6.8	125
1000-160075-001	75 / 160	75 x 6.8	160 
1000-160090-001	90 / 160	90 x 8.2	160
1000-200110-001	110 / 200	110 x 10.0	200
1000-200125-001	125 / 200 ¹	125 x 11.4	200

Double line			
Product code	Dimension	Service pipe OD x s [mm]	Jacket pipe OD [mm]
1120-125000-001	32 + 25 / 125	32 x 2.9 + 25 x 2.3	125
1120-160000-001	40 + 25 / 160	40 x 3.7 + 25 x 2.3	160
1120-160002-001	50 + 32 / 160	50 x 4.6 + 32 x 2.9	160
1121-200005-001	63 + 32 / 200	63 x 5.8 + 32 x 2.9	200

 higher insulation range with increased delivery time

¹ maximum temperature / pressure rating 95°C / 5 bar



- FlexaLink, prefabricated house connections
- All types of homogenous plastic welded Prefabrications
- Full range of weldable PB fittings
- Compression fitting system
- Full range of accessories and tools