

Construction and Urban Industry

Water & Waste Water Equipments

- Shelter is undoubtedly the man's most urgent need after food and clothes, and that's why construction researches are among the oldest and the most complicated ones made by men. In this case, engineers and architects have made great efforts to make high quality buildings out of high quality materials with longer life-time and more reliability. Accessing to five layer **SGP PEXb-AL-PEXb** pipe technology is one of the greatest achievements in this field for us.



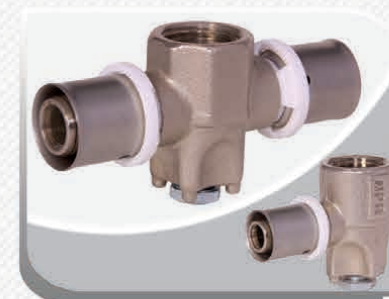
PEXb-AL-PEXb pipes are the only pipes certified by National Construction Rules for hot water at the temperature of 90 centigrade degrees. These kinds of pipes manufactured according to the ASTM F-1281 Standards are used for the following applications:

- Applications in water supplying and potable water, either hot or cold.
- Applications in Medical and Health Industries such as transferring

medical gasses, dialysis systems and so on. These pipes are also used in food industries, pharmaceutical and chemical industries in which the temperature is below 100 degree centigrade.

- Industrial Applications such as; using in chemical production plants for which the metal pipes are not suitable. The pipes are also used in ship and automobile industries and the like.

- Applications in heating and refrigerating Systems such as: using in air-conditioners, cold storage rooms and cold air generating systems because of its resistance against pressure and cracking. These pipes are also used in radiators and floor heating systems for its long-time efficiency at the temperature of 90 centigrade degree.



Technical Specifications of SGP PEXb-AL-PEXb Pipe:

SGP PEXb-AL-PEXb	16	20	25	32	40	50	63
Dimensions (external and internal diameter)	12-16	16-20	20-25	26-32	32-40	41-50	51-63
Weight in length unit (gr/m)	105	145	200	310	490	730	1220
Volume of water in length unit (lit/m)	0.113	0.201	0.314	0.498	0.804	1.320	2.042
Roughness coefficient (mm)				0.007			
Heat transfer coefficient (W/m.k)				0.40			
Longitudinal expansion coefficient (m/m.k)				25×10^{-6}			
Operation temperature (long term)				90°C			
Operation temperature (short term)				110°C			
Minimum long-term temperature				-40°C			
Operating pressure				10 bar			
Minimum radius of bending with hand (mm)	80	100	125	160	---	---	---
Minimum radius of bending with spring (mm)	64	80	100	128	---	---	---
Minimum radius of bending with bending machine (mm)	55	75	95	125	---	---	---

