The elasticity of the Flexalen system allows the total pipe systems to self compensate, expansion loops and elbows can be avoided.

**Anchoring**

At building entry points, plastic pipe ends as well as the continuing indoor pipe system must be anchored in order to avoid excess stress on transitional fitting(s) from both directions.

Exception: Standard building entry elbow risers and pre-insulated elbows do not require anchors on the Flexalen pipe system.
Elongation Forces in PB-1 carrier pipes

![Graph showing elongation forces vs. temperature increase for different pipe sizes.]](image)
Expansion compensation

External pipelines, internal pipelines - horizontal:
For above ground horizontal lines, we recommend that all FLEXALEN pipelines are supported along their entire length by securing to an angle bar bed or adequate cable tray with strong clips or ties placed every metre. Anchoring systems must be used for carrier pipes at both sides of transition fittings.

External pipelines, internal pipelines - vertical:
For vertical lines we recommend that the pipeline is secured to the wall or cable tray with strong clips or ties at the casing pipe every metre. The Flexalen PB pipe in the pre-insulated pipe system has to be anchored every 4 to 5 metres (typically at each floor branching). Use proper anchoring system on both sides of the transition fittings.

Non-insulated Polybutene pipelines:
Precautions must be taken against expansion and contraction, as well as for pipe support, when using non-insulated PB. Please contact your Thermaflex partner for detailed information.
DID YOU KNOW?

PB has 35% lower expansion rate than PEX

Coefficient of Linear Thermal Expansion (ASTM D696)

Technical data are subject to alteration.