

MAXAIR SYSTEM DESIGN GUIDELINES

RECOMMENDED INSTALLATION PRINCIPLES

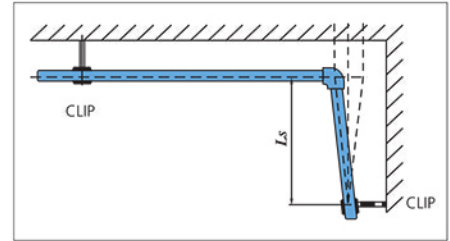
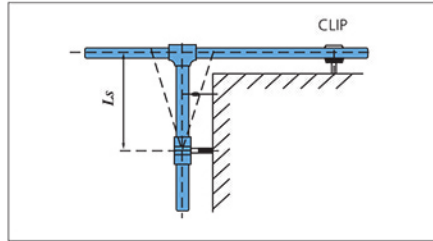
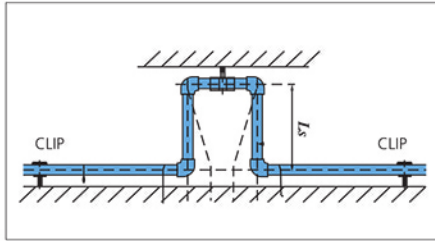
THERMAL EXPANSION AND CONTRACTION PIPE CLIPS / PIPING LAYOUT

The coefficient of the thermal expansion and contraction of Maxair PE100 pipe may be taken as 0.18mm per metre per Deg C. If pipework is to be subjected to thermal temperature change, expansion and contraction needs to be considered for during

installation. Generally movement can be absorbed on changes of direction, elbows, etc. but on longer lengths the recommended installation principles as set out below should be adhered to. This movement is minimised if areas in which pipework is installed are heated or cooled and virtually eliminated in constant temperature areas.

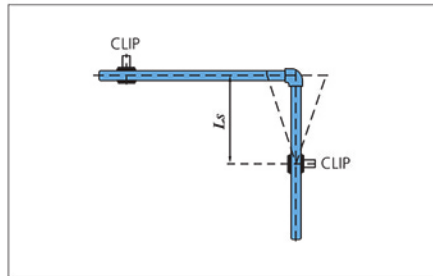
EXPANSION LOOPS

Expansion loops are recommended at intervals of approx. 30-40m on long runs. Suggested leg lengths are as per table below. It is general practice for loops up to AIR 63 to span between purlins. Space constraints may also need to be considered. Please contact our technical department for accurate sizing if required.



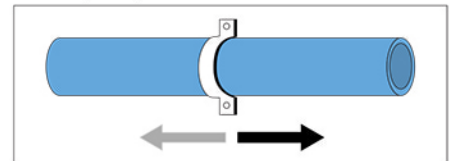
Suggested L s Length (Metres)

| | |
|-----|-----|
| 20 | 0.5 |
| 25 | 0.6 |
| 32 | 0.7 |
| 40 | 0.9 |
| 50 | 1.0 |
| 63 | 1.2 |
| 90 | 1.8 |
| 110 | 2.0 |
| 160 | 2.4 |



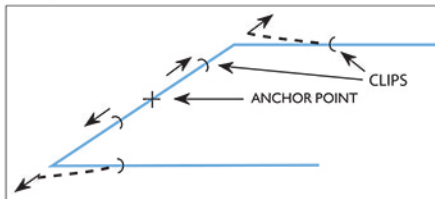
PIPE CLIPS

Free axial movement of pipework should be allowed with any form of support. Pipework should be able to move on elbows, tees, etc.



ANCHOR POINTS

Anchor points are clips which don't allow free axial movement. Anchor points can be used as shown to evenly spread the effects of expansion and contraction.



Below: Working example of Ring Main showing typical expansion loops and anchor point positions for this schematic.

