

TECHNICAL BULLETIN

» 629 / 682 SERIES

SUBJECT: Air Chambers - Discontinued

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Sioux Chief has discontinued offering any preformed copper (PFC) items intended for use as a permanent air chambers, such as the 629 Series Reducing Air Chambers and 682 Series StubAirs™. Other spun-closed PFC copper stub outs, will remain in the line and will include a notice that they are *intended for temporary stub out applications only, and not to be used as permanent air chambers.*

Plain air chambers (handmade or factory made) have been installed for water hammer control for over a hundred years, but now have become a dying breed. It is a well-known fact that air chambers quickly waterlog and are rendered useless. For that reason, the vast majority of contractors now install engineered arresters on residential and commercial projects to satisfy the water hammer control requirements of their local codes. Unlike plain air chambers, certified arresters are permanent products that do not waterlog.

More recently, engineers, health organizations and national design guides now strongly recommend that plain air chambers, otherwise known as "dead legs," should not be permitted in potable water systems, because stagnant water promotes the growth of bacteria such as Legionella. More and more outbreaks of Legionella (which causes Legionnaires' Disease) in building water supply systems are occurring every year. The National Institutes of Health's Plumbing Design Guide specifically calls out that plain air chambers should NOT be permitted due to their potential for stagnation. Certified arresters that do not harbor stagnant water, such as piston-style arresters, should be installed instead.



Permanent air chambers should no longer be used

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