

TECHNICAL BULLETIN

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Achieving the Proper Fit of Aerocel® EPDM Insulation on Pipes

With so many piping types (metallic and plastic) available on the market with varying outside diameters (OD's), it can be a challenge to achieve the right fit with preformed pipe insulation.

Like most American mechanical insulation manufacturers, Aeroflex USA's Aerocel® brand of EPDM closed cell foam pipe insulation tubes are manufactured with inside diameter (ID) specifications to fit the most common copper and iron pipe OD's ranging from 1/4" to 16" IPS.

When selecting the correct pipe insulation ID, the ideal size is the one that fits snugly around the pipe without tension. The insulation should never be stretched to fit over the pipe with the longitudinal seam under stress. It is actually better if the insulation fits loosely over the pipe than too tight.

If an air gap exists between the insulation and pipe (annular space), it is acceptable as long as all longitudinal seams, butt joints and terminations are completed sealed with Aeroseal, Aeroseal LVOC™ Black or REF 1520™ adhesives. The adhesive creates a vapor seal to prevent air and moisture from penetrating beneath the insulation (vapor drive) and potentially causing corrosion under insulation (CUI).

As an additional level of protection against vapor drive for interior applications, Protape® (zero-perm EPDM tape) should be installed over all glued seams. Protape is required for all exterior installations. It's important to point out that Protape should never be applied over unglued seams.

If a snug fit is desired but cannot be achieved with Aerocel unslit or Stay-Seal® with Protape® (SSPT™) tubes on pipe sizes above 4" IPS, Aerocel Sheets & Rolls can be specified and installed to provide a proper fit. The same installation principals apply.

To learn more Aerocel EPDM pipe insulation, visit https://www.aeroflexusa.com/aerocel-hvac-pipe-insulation