

Bonding AEROFLEX EPDM™ to Calcium Silicate and Phenolic Pipe Supports

Rigid calcium silicate (calsil) and phenolic pipe supports are commonly specified and installed as a component of insulated mechanical piping systems at hanger, strut, and pipe rack locations. Pipe supports prevent insulation from being crushed by piping under live active loads.

Whenever possible, Aeroflex USA recommends [Aerofix® Insulated Pipe Supports](#) with our EPDM pipe insulation as part of a warranted “closed-cell” AEROFLEX® system.

However, we partnered with Thermal Pipe Shields (TPS) to test the adhesion performance of AEROFLEX AeroSeal and AeroSeal LVOC™ Black Adhesives with TPS’s calsil and phenolic supports.

When TPS calsil or phenolic pipe supports are specified to be installed with AEROFLEX EPDM, the following procedures should be followed when sealing the two materials together at the circumferential seams:

- ⇒ Thoroughly clean and remove dust from sides of calsil and phenolic supports with denatured alcohol
- ⇒ Apply thin primer coat of AeroSeal or AeroSeal LVOC™ Black Adhesive to calsil or phenolic pipe support and allow to dry
- ⇒ Apply 2nd coat of AeroSeal or AeroSeal LVOC™ Black Adhesive to calsil or phenolic support and adjoining AEROFLEX pipe insulation; allow to tack up until “dry to the touch”
- ⇒ Apply insulation tubes to both sides of the calsil or phenolic supports under compression
- ⇒ Ensure that entire pipe support is insulated and glued to provide vapor seal and to prevent thermal bridging (condensation)
- ⇒ Wrap all glued seams with [AEROFLEX Protape®](#)

Aeroflex USA only tested our adhesives with TPS products. We determined that by following the above installation procedures, a successful bond and vapor seal can be achieved.

While the same procedures theoretically can be applied to other calsil and phenolic pipe support brands, we have not tested and will not stand behind the above recommended system with other calsil and phenolic pipe supports.

Since Aeroflex USA does not manufacture calsil and phenolic pipe supports, their performance is not covered by Aeroflex USA's Express Limited Warranty.

More detail about this application can be located on page 57 of the [AEROFLEX® Installation Guide](#).