

TECHNICAL BULLETIN

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Installing AEROFLEX Breathe-EZ® PSA Duct Liner Without Pins

Most duct liner specifications require that duct liner be mechanically fastened (pinned) to the sheet metal duct with weld pins. Pinning, which is in addition to the application of wet-applied or PSA adhesives to bond the insulation to the inside of the ductwork, fulfills the requirements of SMACNA's Duct Construction Standard.

Duct insulation manufacturers typically report "air erosion" testing up to 10,000 fpm and reference ASTM C1071 and/or UL181. The test method requires subjecting the insulation to air velocities at a rate 2.5 times the manufacturer's published maximum fpm. For example, 4,000 fpm continuous x 2.5 = 10,000 fpm test velocity.

When mechanical fastening is not a project requirement, AEROFLEX Breathe-EZ Duct Insulation with PSA can be installed as a duct liner without pins when expected air velocities will not exceed 4,000 feet per minute (fpm, continuous). The insulation will not break away, crack, peel, flake off, or show evidence of delamination or continued erosion. At leading edges, a metal nosing shall be installed per the SMACNA Duct Construction Standard.

In addition to thoroughly cleaning the sheet metal, fabrication and installation of Breathe-EZ **PSA** Duct Liner, as detailed in <u>Aeroflex USA's Installation Guide</u>, must be carefully followed.

Caution: Installing standard AEROFLEX Breathe-EZ (no PSA) without mechanical fasteners is not an approved installation method.