

Adjustable Flow Device (AFD™)

Airflow Control

Designed for new systems, as well as retrofits, our patented AFD controls airflow. It is easily installed or replaced in minutes by zipping or unzipping its collar between duct lengths. It is available in 6 inch to 80 inch diameters. Besides benefits of airflow control, the AFD also serves as a flow straightener. The AFD will be preset from the factory to the recommended setting per location and should not require any field balancing unless otherwise specified.



Standard Design/Location:

Inlet

- Each inlet when multiple inlets are connected to a common AHU/fan
- Any system that has an apparent turbulent inlet configuration

Middle

- All systems with an intermediate zipper over 40 ft and inlet velocity over 1,400 CFM

No Pop

- All systems over 100 ft and over 5,000 CFM placed within last 30% of run

Plenum

- After outlet (or outlets within 10 ft) when plenum velocity is over 1,200 FPM

Exceptions

- Typically, systems should not include more than two AFDs in sequence to an endcap

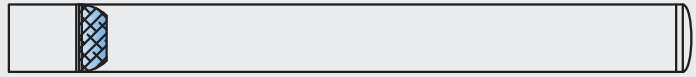
Coronado, Sedona-Xm, and TufTex

- AFD devices come standard with each system constructed of our Coronado, Sedona-Xm, and TufTex premium fabrics (the AFD is an optional feature with all of our other fabrics)

Simple adjustments to the opening size varies flow restriction characteristics of the AFD. Relative to inlet velocity, this restriction can help offset the effects of static regain to properly balance airflow through vents.

Inlet

- Balance multiple runs
- Reduce/eliminate airflow turbulence



Middle

- Balance static regain



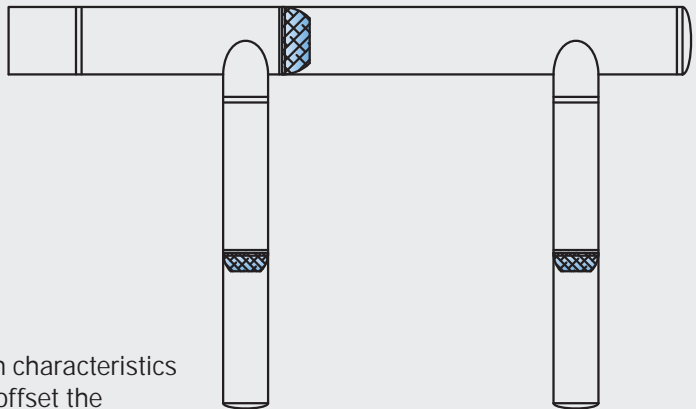
No Pop

- Reduce inflation "pop"

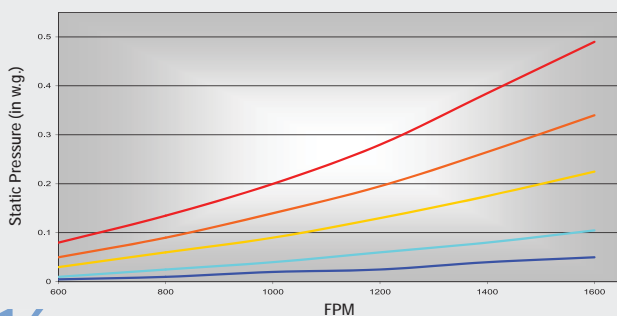


Plenum and Branches

- Direct airflow into branches and balance static regain



Pressure Drop vs. Inlet Velocity



Static Regain

