# Sure•Seal™ Spiral Energy Savings

## Sure•Seal™ 12" diameter test results

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Test results for 10" wg positive pressure had .52 cfm leakage for 100 square feet of 12" dia ductwork

### Sure•Seal™ Leakage For 10" Positive Pressure

| CFM | | $ CFM | | $ for 100 sqft | $ for 1,000 sqft | $ for 10,000 sqft | **Leakage** |
|---|---|---|---|---|---|---|---|
| 0.52 | X | $1.75 | = | **$.91** | **$9.10** | **$91.00** | **$ per year** |

*Average cost to heat and cool 1 cfm for 1 year is $ 1.75*

## SMACNA Construction Standards

SMACNA maximum allowable leakage is 13.50 cfm for 100 square feet of 12" diameter ductwork

### SMACNA Standards Allowable Leakage

| CFM | | $ CFM | | $ for 100 sqft | $ for 1,000 sqft | $ for 10,000 sqft | **Leakage** |
|---|---|---|---|---|---|---|---|
| 13.50 | X | $1.75 | = | **$23.62** | **$236.25** | **$2362.50** | **$ per year** |

*Average cost to heat and cool 1 cfm for 1 year is $ 1.75*

Tapes and mastic are conventional choices for sealing ductwork and the most cost effective time to seal ductwork is at installation of system. The cost of restoring systems not receiving the required sealing or not being properly sealed can greatly exceed the cost of a proper application. The transverse ductwork joint may have up to a 3/16" gap around circumference of the duct that will have to be sealed in field and SMACNA does not recommended that a duct system constructed to 3" wg class or lower be leak tested. Concerns for energy conservation, humidity control, space temperature control, room air movement, necessitate regulating leakage by prescriptive measures in SMANCA Construction Standards. *Leakage is largely a function of static pressure and the amount of leakage in a system is significantly related to system size.* Adequate airtightness can normally be ensured by **a.** selecting a static pressure, construction class suitable for the operating condition and **b.** sealing ductwork properly. If the ductwork system is not properly sealed this will result in air leakage above ceiling, energy loss and higher utility costs. **The advantage of Sure•Seal™ Spiral is a manufactured system with low leakage rates, this eliminates field workmanship, sealant application and leak testing.** ***As a price comparison, the elimination of sealing ductwork in the field would offset any additional manufacturing cost.***