

PERMATRON AIR FILTERS **DIRECTIONAL AIR FLOW**

Some of our filters are designed with stacked media encased in a 1" frame, like our LifeStyle Plus® MF and LR models. The filter media is layered so that the same media is the outside layer on both sides of this filter. There is 1 layer of different/thicker media in the center. The media in the center depends on what efficiency the filter model is trying to achieve...i.e., low resistance or maximum filtration. These filter do not have a directional air flow, since the air flows though the same media, no matter what side it flows through.

Some of our filters are designed with our exclusive Accumulator Chamber® construction. This filter design represents a mini filter bank, or has been referred to as 3-stage filtration. The outer steel frame holds (2) 1/4" steel framed panels inside, which are separated by air space which we call our Accumulator Chamber. In these filters the 1st panel (prefilter) made of just polypropylene media allows air to flow through, enhancing its electrostatic charge. If excess (called face loading) particulates build up on the prefilter, they tend to break off, allowing air flow to sweep them through the prefilter into the Accumulator Chamber. The 2nd panel (afterfilter) sometimes contains additional media, like nonwoven polyester or foam or supporting wire encased in polypropylene. The more efficient afterfilter captures the smaller particles that were not captured by the prefilter. These filters would have a directional air flow (air flows through the prefilter to the afterfilter), because they contain a lower resistance prefilter and a higher resistance afterfilter. So when they are washed, they should be back flushed for best results. That means water flows through the afterfilter to the prefilter.

Filters that include a directional airflow are the DustEater® and Model HFA. The Easy Flow and Model IN do have the Accumulator Chamber construction, but both interior panels contain only polypropylene, so there is no directional air flow since the media is the same throughout the whole filter.