



## Evaporative Cooler Media

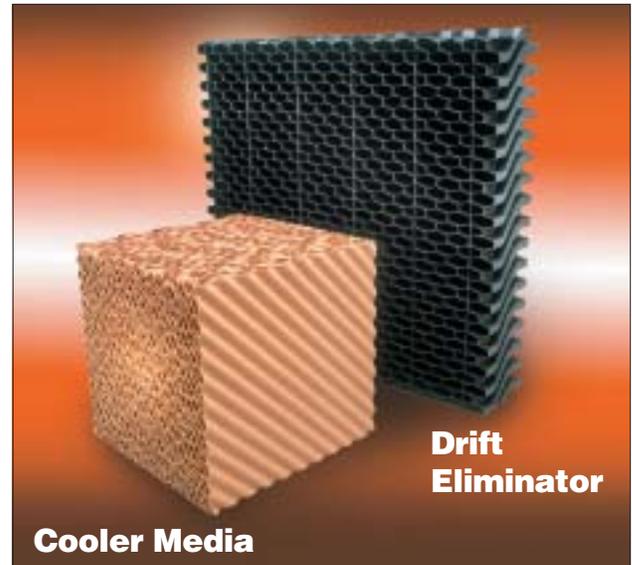


### Evaporative Cooler Components:

Pneumafil evaporative coolers contain several essential components that must be maintained to provide proper operation of the cooler: evaporative cooler media, distribution pads, and droplet or drift eliminators. If you operate a Pneumafil designed filter inlet system with evaporative cooler, consult the Spare Parts List in the Pneumafil Operation Manual for specific information on the cooler components in your system. Pneumafil components may also be used in competitive inlet air systems. In operation, water is re-circulated onto the cooler media with a pump mounted inside the filter module where it evaporates. Distribution media disperses the re-circulated water from the pump evenly over the top of the cooler media. Interlocking drift eliminators catch any droplets escaping from the media.

### Cooler Media:

Pneumafil evaporative cooler media is rigid, self-supporting cellulose material chemically treated to resist degradation and yield high evaporation rates. Media is cross fluted in unequal angles to promote mixing of the air and to direct more water to the air entering face where the air is hottest and driest and where the most intense evaporation takes place. The depth of media in direction of airflow varies depending on the site condition and design criteria.



### Distribution Pads:

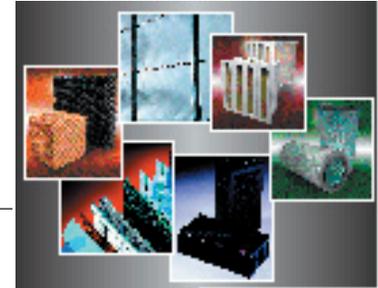
Distribution pads are used in conjunction with cooler media for lateral distribution of water to the cooler media below. These specially designed 2" or 3" pads are also protected with patented edge treatment. Distribution pads are constructed of the exact same material as the cooler media.

### Drift Eliminator:

When the air passes through the drift eliminators, the water droplets impinge on the outside of each turn. They are drawn out of the air stream into the drainage channels and form droplets large enough to fall out the entering side of the drift eliminators without becoming re-entrained.



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### Description:

Pneumafil Evaporative Cooling Media has exceptional cooling rates due to its design, manufacturing and materials used. The unequal flute design flushes dirt and debris from the surface of the pad. This cleaning action directs water toward the air entering face of the pad where it is needed most. See the attached data sheets on pressure drop and cooling effectiveness for various depths of media and air velocity combinations.

### Cooler Media Sizes:

Standard sizes available are:

Length: 48", 60", 72"

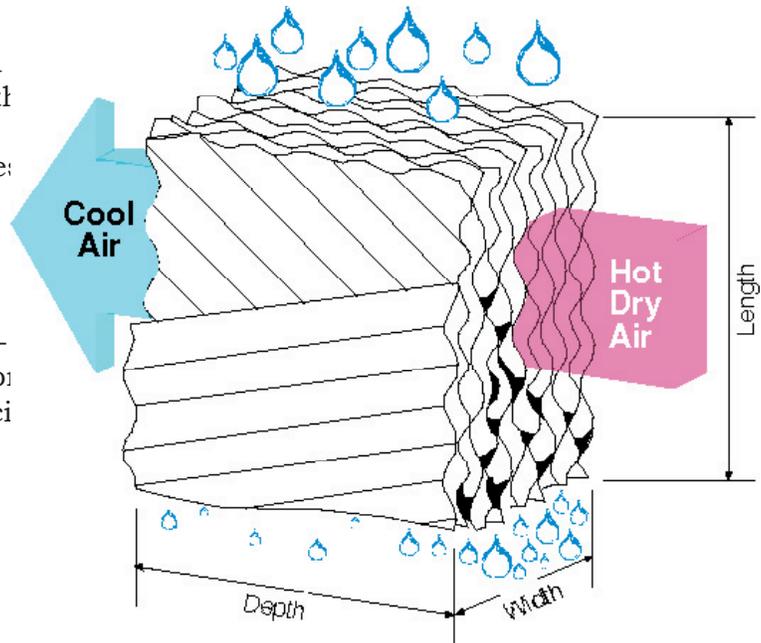
Width: 12"

Depth: 6", 8", 12"

Custom sizes are available if required

Although field cutting is possible and may be required for proper installation, Pneumafil recommends ordering all media cut to size in the factory. Factory tolerance on any dimension is +/- 3/16". Consult your inlet system operation manual for exact sizes of media required for your inlet.

Many Pneumafil inlet filter systems are designed with a total depth of 14" of cooler media to achieve 90% cooling efficiency. The total depth is achieved by using a 6" deep media element followed by an 8" deep element.



### Ordering:

All evaporative cooler media is specified by the base part number **S52146**.

Exact sizes are tabulated using a two or three digit suffix in the format **-C##**.

Example: An 8" deep x 12" wide x 72" long cooler media element is designated by the part number **S52146-C1**. See submittal drawing number S52146-C for the complete tabulation of previously defined sizes.