

HumiCool Division

# 5090

Evaporative Cooler Pads



## Munters 5090

Munters® 5090 evaporative cooling pads are made from a special high cellulose paper which is treated to resist degradation. 5090 pads are manufactured to the same high standards as Munters other evaporative cooling pads. This means consistent performance and long service life. And 5090 cooling pads are backed by Munters unsurpassed engineering services.

Munters' unique cross-fluted design of the pads induces a highly turbulent mixing of air and water for optimum cooling and enhanced self cleaning.

5090 has predictable consistent performance. Because it is manufactured to a carefully engineered design, it performs the same way day after day, year after year, every time you start up your cooler.

To assure the best possible, drift free performance, it is recommended to operate 5090 at velocities of 350 fpm (1.8 m/s) or less. Most fiber pad coolers are designed to operate with pad velocities of 150 to 250 fpm (0.75 to 1.3 m/s), so Munters 5090 cooling pads can be used as a direct replacement for fiber (aspen) pads.

The distinct cross corrugated channels combined with the optional water distribution pad assures even wetting over the face of the cooling pad. This means the water does not channel or cause dry areas to occur on 5090 pads having water delivered as outlined in Table 1.

## PRODUCT INFORMATION

### Benefits

- Cool building space temperatures
- Low operating and maintenance costs
- Environmentally friendly, fresh, clean air
- Reduced energy costs

### Features

- High cooling effectiveness
- Consistent performance
- Self cleaning design
- Long life (3-5 times longer than fiber pads)
- Fits into existing aspen pad frames

### Applications

- Precoolers
- Industrial Humidification
- Residential Cooling
- Gas Compressor Stations
- Commercial Applications
- Gas Turbines
- Livestock Confinement
- Vegetable Storage



5090 high performance cooling pads



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## Installation

5090 must be installed directly under the water distribution pan. The pad should be secured across the face in 2 foot increments and also be supported at the bottom. A standard fiber pad frame is usually adequate. 5090 is rigid and self supporting; therefore metal spikes are not needed.

5090 will evaporate more water. To achieve the best performance, it is necessary to use a high capacity water distribution pump. Excess water will help to keep the pad flushed out and reduce mineral deposition.

## Available Sizes

5090 evaporative cooling pads are available in standard sizes of 2", 3", and 4" (25, 50 and 100 mm) in depth, 12" (300 mm) wide and up to 72"(1830 mm) long.

## Maintenance

5090 is cleanable and scrubable. Performance of 5090 cooling pads can be maintained from year to year.

The pads should be removed from the cooler for cleaning. Use a soft scrub brush to loosen heavy deposits. Loose dirt and debris can be removed by shaking the dried pad. Rinse sediment from the basin of the cooler and replace the pads. The cooler and pads may be disinfected by flushing with an ammonium chloride based biocide labeled for use in evaporative coolers.

Harsh acid chemical cleaners, sodium hypochlorite or calcium hypochlorite (chlorine) and hydantoin (bromine) biocides are not recommended for use on evaporative pads.

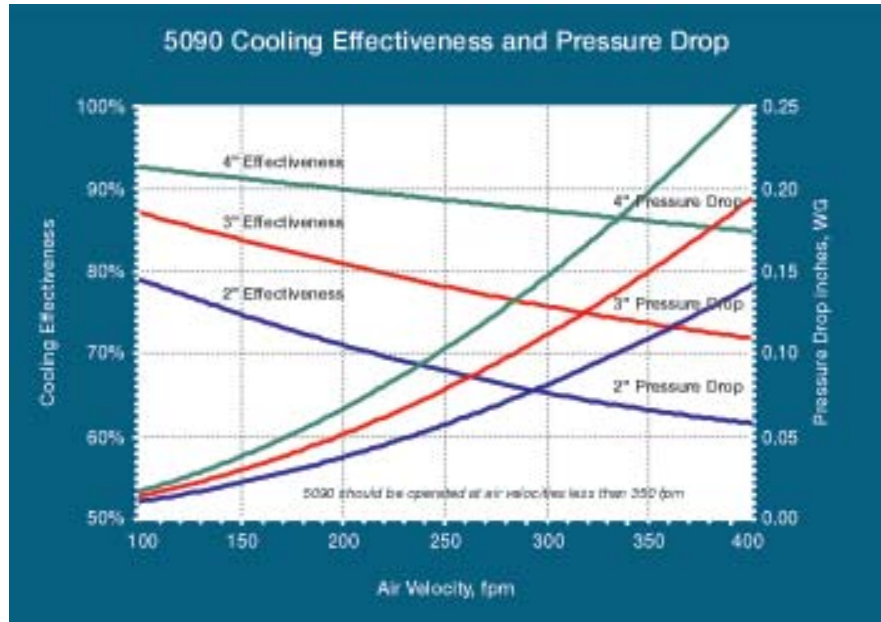
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**Table 1: Water Flow Requirements**

2" (50 mm) depth	0.25 gpm/linear ft (0.05 l/s-m)
3" (75 mm) depth	0.33 gpm/linear ft (0.075 l/s-m)
4" (100 mm) depth	0.50 gpm/linear ft (0.10 l/s-m)



Cooling Effectiveness and Pressure Drop for various depths of 5090 evaporative cooling pads.

## Caution

Do not expose Munters 5090 evaporative cooling pads to sparks, open flame, welding spatter, temperatures in excess of 350°F, or other sources which may ignite the paper.

If ignited, Munters 5090 will burn rapidly. Extinguish fire with copious amounts of water.



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Master Industrial/Commercial HVAC Distributor:



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