







# **OXYVAP**<sup>®</sup>

#### STANDARD SIZES

#### **COOLING PRINCIPLE**

Direct evaporative cooling is a natural cooling method that cools and humidifies the airstream. Outdo During the cooling season, hot intake (outdoor) air flows through the soaked OXYVAP<sup>®</sup> media and is cooled down by the adiabatic evaporation process whereby the energy to evaporate the water comes from the air itself. The cool and saturated supply air approaches the wet-bulb temperature and can be provided to the indoor environment or used for other purposes.



The OXYVAP® has been designed to provide adiabatic cooling and humidification for high performance applications such as evaporative coolers, air handling units and data center cooling. It can also be used as a droplet eliminator inside an air handling unit. These applications require the highest possible performance with minimal maintenance and must comply with high hygiene standards. OXYVAP® is VDI 6022 hygiene certified. The media are made of non-organic aluminum HydroChill fins with an anticorrosion coating. The HydroChill fin technology is a combination of a special fin structure and a thin water-retaining coating, designed to keep pressure drop at minimum while delivering evaporation efficiencies that exceed 90%. Its modular design offers customers the necessary flexibility to accommodate for different airflow capacities as required in their product portfolios while maintaining the individual component performance characteristics. On top of this, the permanent antibacterial and antimicrobial coating reduces microbial activity with 99.99% during its entire lifetime.

#### FEATURES

- Marine-grade aluminum finned sheets with anticorrosion coating
- Hydrophilic and hygroscopic water-retaining coating
- Permanent antibacterial coating
- Fully modular and self-supporting frame
- Integrated non-organic water distribution and collection tray
- Minimal maintenance due to vertical fin structure
- VDI 6022 hygiene certification



	OXYVAP® Mod.								
	303/601/96	303/745/96	303/901/96	505/601/96	505/745/96	505/901/96	892/601/96	892/745/96	892/901/96
Dimension A	303	303	303	505	505	505	892	892	892
width in mm (inch)	(11.9)	(11.9)	(11.9)	(19.9)	(19.9)	(19.9)	(35.1)	(35.1)	(35.1)
Dimension B	601	745	901	601	745	901	601	745	901
height in mm (inch)	(23.7)	(29.3)	(35.5)	(23.7)	(29.3)	(35.5)	(23.7)	(29.3)	(35.5)
Dimension C	96	96	96	96	96	96	96	96	96
thickness in mm (inch)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)
Total Surface	0.18	0.23	0.27	0.30	0.38	0.46	0.54	0.66	0.80
in m² (ft²)	(1.96)	(2.43)	(2.94)	(3.27)	(4.05)	(4.90)	(5.77)	(7.15)	(8.65)
Eff. Surface	0.15	0.19	0.23	0.26	0.33	0.40	0.47	0.59	0.73
in m <sup>2</sup> (ft <sup>2</sup> )	(1.61)	(2.05)	(2.48)	(2.80)	(3.55)	(4.31)	(5.06)	(6.35)	(7.86)
Weight	2.09	2.57	3.09	3.42	4.22	5.09	5.96	7.38	8.92
Dry in kg (lb)	(4.61)	(5.67)	(6.81)	(7.42)	(9.31)	(11.22)	(13.14)	(16.27)	(19.67)
Weight	3.46	4.34	5.30	5.90	7.37	8.97	10.58	13.18	16.0
Wet* in kg (lb)	(7.63)	(9.57)	(11.69)	(13.01)	(16.25)	(19.78)	(23.33)	(29.06)	(35.28)
Nominal Water Flow**	2.17	2.17	2.17	3.75	3.75	3.75	6.79	6.79	6.79
in L/min (gpm)	(0.57)	(0.57)	(0.57)	(0.99)	(0.99)	(0.99)	(1.79)	(1.79)	(1.79)

\*Wet weight is based on the effective surface of the pad: 10 liters / m<sup>2</sup> effective surface (0.245 gal/ft<sup>2</sup>) \*\*Water flow is based on the width of the pad: 7.85 liters / minute / meter width (471 L/h/m or 38 gal/h/ft)

### PERFORMANCE





## OXYVAP<sup>®</sup>





#### MODULAR SYSTEM

- EFFICIENCY, LONGEVITY AND HYGIENE IN TOTAL HARMONY
- ANTIMICROBIAL EVAPORATIVE MEDIA
- EXCELLENT EFFICIENCY/PRESSURE DROP RATIO
- MODULAR, SELF-SUPPORTING DESIGN WITH INTEGRATED WATER DISTRIBUTION AND COLLECTION

### About Oxycom

Oxycom understands the need for fresh and cool air. In this age of growing environmental concern, our goal with the highly efficient direct evaporative cooling pad Oxyvap® is to improve the indoor climate and to optimize cooling systems. Inspired by nature, we develop and produce today's most practical and energy-efficient solutions that point to the future of climate control.

#### **Oxycom Fresh Air BV**

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