



## Case Study

# Pride Purple gets an energy efficient cooling solution for its sales office

The primary concern with any kind of cooling solution is the amount of energy consumed and the cost involved with it. This is generally because it is very difficult to find a solution that not only gives a comfortable ambience i.e., the right temperature and humidity, but is also energy efficient and does not burn a hole in one's pocket. Pride Purple, one of the leading real estate companies in western Maharashtra, was searching for such a solution for its sales office in Pune, and found the perfect one – the HMX-Ambiator!

#### **Background**

The Pride Purple Group is one of the leading construction firms in western Maharashtra. Established in 2000, it already has more than 10 million square feet of noteworthy construction under its belt. Pride Purple's most recent project in Pune – the Trinity 115 Hilltown residential project – is spread over 100 acres. It needed an energy efficient cooling solution for its state of the art sales office at its Trinity 115 Hilltown site.

## Challenge

The sales office at Trinity was intended to be an "open doors" office for potential customers. The 3500 square feet lobby at its entrance required a cooling solution that operates effectively even while the door is kept open and at the same time is energy efficient.

Air-conditioning was ruled out since it entailed a huge investment and an even bigger operating and maintenance expenditure. Moreover, air-conditioning works in recirculation mode and doors need to be closed at all times. Other conventional modes of air-cooling were not considered since they fail to maintain the desired level of comfort.

### Solution

This is when Pride Purple turned to HMX for a suitable solution. It needed the temperature to be maintained at less than 28°C and relative humidity to be less than 75% round the clock, year round.

Keeping in mind the area and occupancy load, HMX has installed an HMX-Ambiator with a 20000 CFM capacity. The HMX-Ambiator is a two-stage evaporative cooling solution (Indirect Direct Evaporative Cooling), which is an excellent upgrade over air washers and normal ventilation systems, as well as an energy efficient alternative to conventional air-conditioners.



HMX-Ambiator at Purple Pride

# Result

Given below is the temperature recordings taken at the site on 1 August 2016 at 12.30 pm while the HMX-Ambiator was in operation.

Unit details	Ambient		Room	
HMX-Ambiator 20K	DBT (°C)	WBT (°C)	WBT (°C)	DBT (°C)
	30.5°C	23.5°C	23.5°C	22°C

Besides maintaining a low temperature, the HMX-Ambiator works with 100% fresh air, and consumes less than half the energy of an equivalent air-conditioning system. Also, it provides a dust free environment which helps dilute potential pathogen density in the air, thereby improving the Indoor Air Quality (IAQ).

The Pride Purple office now enjoys 100% fresh cool air at an affordable cost. The management is very pleased with the IAQ and the performance of the HMX-Ambiator.



