

Cooling Tower Information

What is a “cooling tower”?

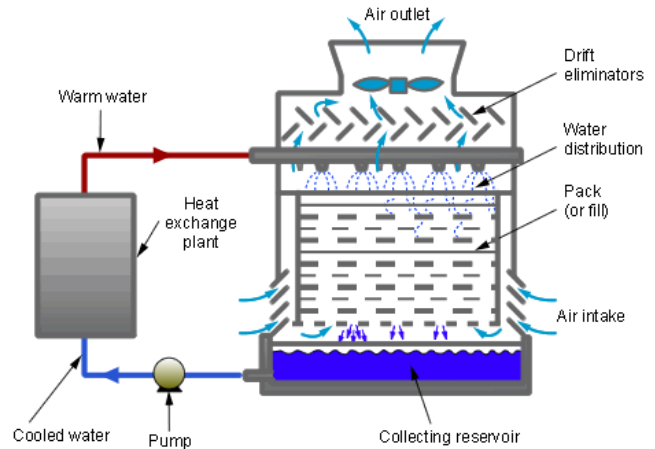
A cooling tower is a system that dissipates heat to the atmosphere. Typical cooling towers use air and gravity to cool hot water in a looped heat exchange system. This process is also known as evaporative technology.

Use of “cooling tower” units?

Cooling towers can be used in high rise buildings and are typically associated with the heating, ventilation and air conditioning (HVAC) system. Cooling towers can also be used in commercial/industrial buildings as part of their specific operation.

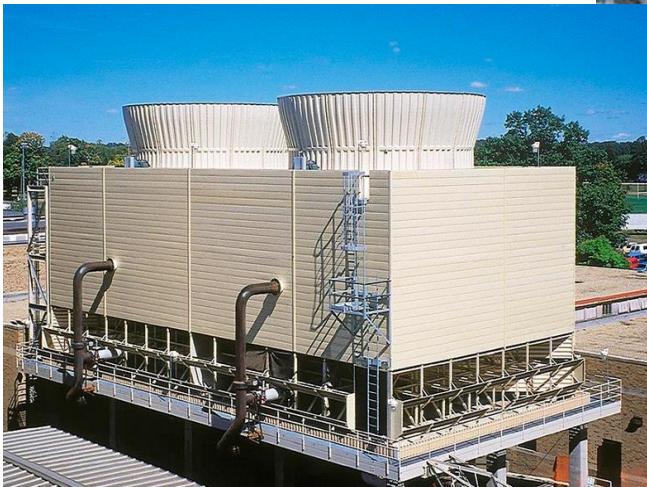
How does a “cooling tower” work?

Hot water enters the system at the top of the heat exchanger. This water then falls by gravity through a medium which is ventilated. Ventilation causes the hotter water to evaporate off into the air while cooler water remains liquid and continues down the medium into the bottom basin. The collected cool water is transported back to the source of heat and cycled through the loop to be reheated and cooled again.



Elements of building top cooling tower.

- Fan on top
- Piping entering near the top
- Air vents on the side
- Piping exiting the bottom



Other rooftop units that can resemble cooling towers which are not a cause of concern:

- Air Ventilation unit
 - Will not have typical fan on top or top/bottom piping configuration.
- Air Conditioning Condensers (closed loop systems which do not use evaporative technology)
 - Will not have top/bottom piping configuration.
 - Top fan is typically recessed in unit
- Water tower/tank
 - Will not have typical fan on top or top/bottom piping configuration.

Image Sources:

<http://www.quora.com/What-is-the-complete-working-system-of-a-cooling-tower>

<http://www.salaair.com/coolingtower.htm>

<http://www.allkoteliningincaz.com/>