

# Low Environmental Impact Solutions

PROVIDING ENERGY EFFICIENT EVAPORATIVE HEAT TRANSFER PRODUCTS



**BALTIMORE  
AIRCOIL COMPANY**

# Our Solutions



## Evaporative Cooling versus Air Cooled Equipment

Evaporative cooling combined with air convection is a more effective way of cooling versus air cooling only, resulting in lower energy consumption.

- ✓ Reduces energy usage by approximately 35%
- ✓ Increased efficiency results in lower overall water consumption
  - ✓ Overall water usage takes into account:
    - › Water used at the power plant to create electricity
    - › Water used in the mining process to extract power producing minerals
- ✓ Reduced plan area
- ✓ Reduced sound



## Cooling with Ice Thermal Storage

Ice thermal storage systems provide solutions to lower energy consumption during peak energy demand.

- ✓ Storing cooling capacity during off-peak hours, reduces the need for electrical demand at peak hours and can reduce energy consumption.
- ✓ Lower green house gas emissions are generated by power facilities at night.
- ✓ More efficient energy transfer through power lines occur at night due to lower ambient temperatures.
- ✓ With a partial storage system, the building will have smaller refrigeration plant which requires less refrigerant, lowering refrigerant loss to the environment.
- ✓ Low temperature distribution air systems use smaller air handling units and pumps reducing overall energy consumption.

As a member of the U.S. Green Building Council (USGBC) Baltimore Aircoil Company understands that with over 9,142,800 shades of the color green, you have choices in purchasing high performance, sustainable products. This brochure will provide a brief understanding of how BAC continues to lead the Evaporative Cooling and Ice Thermal Storage markets, in providing products that reduce the impact on the environment.



### BAC products and LEED® Credits

BAC's innovative evaporative cooling, ice thermal storage or water saving hybrid cooling equipment can help a building earn LEED Credits.

#### Evaporative Cooling Products:

- ✓ All of BAC's standard evaporative cooling products exceed ASHRAE 90.1 Guidelines and may earn extra Energy and Atmosphere Credits.
- ✓ All BAC evaporative cooling products have premium efficient/inverter duty fan motors as standard.
- ✓ Variable frequency drives optimize energy savings based on load and outdoor conditions.

#### Ice Thermal Storage Products:

- ✓ Using ice thermal storage may earn Energy and Atmosphere Credits
- ✓ Ice thermal storage lends itself to using low temperature air which improves indoor air quality and may earn credits for Indoor Environmental Quality.
- ✓ Hybrid products and ice thermal storage may earn Innovation credits.
- ✓ Ice thermal storage and hybrid products optimize energy and water usage.



### Water Saving Hybrids

The HXV Hybrid Cooling Tower utilizes "dry/wet" operation resulting in reduced water consumption versus conventional evaporative cooling.

- ✓ Fouling potential of the process loop is eliminated due to closed loop cooling which maintains peak efficiency and energy savings over time.
- ✓ Water savings of up to 70% are possible.



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### **Locally Sourced Units**

BAC has strategically positioned manufacturing facilities allowing for short delivery distances and reduced emissions from shipping.



### **Recycled Content**

BAC manufactures its equipment with up to 64% recycled content. The materials include steel in structures, PVC for fill and piping, aluminum sheaves, and copper windings in electric motors.

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