Code Changes for Air Curtains

- **Code Change Approved!** Code Change proposal, CE192-13, toward the 2015 IECC (International Energy Conservation Code) was approved at the IECC (Group B) Committee Action Hearings in Atlantic City, N.J.. The code change adds **air curtains as an exception to a vestibule** in the section **C402.4.7 Vestibules**. The new code reads:

  Exceptions: Vestibules are not required for the following: **Item 6. Doors that have an air curtain with a minimum velocity of 2 m/s at the floor, have been tested in accordance with ANSI/AMCA 220 and installed in accordance with manufacturer’s instructions. Manual or automatic controls shall be provided that will operate the air curtain with the opening and closing of the door. Air curtains and their controls shall comply with Section C408.2.3.**


- **Code Change Approved!** The 2012 IgCC (International Green Construction Code) states, “Where a building entrance is required to be protected with a vestibule in accordance with the International Energy Conservation Code, **an air curtain** tested in accordance with ANSI/AMCA 220 is permitted to be used as an alternative to separate conditioned space from the exterior.”

  See page 37, Section 605.1.2.3 Air Curtains in the 2012 IgCC.


- Cost to the Owner: an air curtain costs $2,000 - $6,000 to purchase and install, a vestibule costs $20,000 - $60,000 to purchase and install.

- Research shows that Air Curtains are equal to or more effective than Vestibules at saving energy and maintaining comfort.

  Air Movement & Control Association Intl. (AMCA Intl.) research paper titled, “Investigation of the Impact of Building Entrance Air Curtain on Whole Building Entrances.”

- Operating Costs to Owner:
  
  Consider that a vestibule has two doors instead of one:
  - additional doors and space to maintain, operate and clean
  - lighting, exit signs and security
  - cabinet unit heaters

- Advantages of a Heated Air Curtain vs. A Vestibule
  - Construction costs reduced by $14,000 - $54,000
  - No additional HVAC equipment and ductwork required
  - Reduction in electrical costs for wiring and signage
  - Fewer doors to maintain and service
  - Increased floor space for equipment or revenue-generating product
  - Proven energy savings
  - Increased comfort for the building occupants