


various types of air barriers, a library of technical articles, member directory, and other important information. ABAA also trains and certifies air barrier installers and provides building owners with a quality assurance program (QAP) to assist in delivery of a quality air barrier on a specific project.

Conclusion

Air barriers in building envelope construction provide significant HVAC energy savings. Buildings consume nearly half of U.S. energy use, so installing air barriers in buildings can dramatically impact national energy consumption. Constructing buildings with barriers can contribute significantly toward efforts to reduce U.S. dependence on fossil fuels and can lower greenhouse gas emissions and lessen consumption of valuable energy resources. Air barriers also enable a more comfortable and healthy interior. 

References

- 1 The Alliance to Save Energy charter and published information can be accessed at www.ase.org/content/article/detail/2356.
- 2 LEED (Leadership in Energy and Environmental Design) programs for new construction can be accessed at www.usgbc.org/DisplayPage.aspx?C

- MSPageID=220.
- 3 International Energy Conservation Code 2006.
 - 4 American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings, 90.2 Energy Efficient Design of Low-Rise Residential Buildings.
 - 5 NISTIR 7238. The full report is publicly available at www.fire.nist.gov/bfrlpubs/build05/PDF/b05007.pdf.
 - 6 CMR 780 is accessible to the public at www.mass.gov/bbrs/energy.htm.
 - 7 MasterFormat® 2004 is available for purchase from the Construction Specifications Institute (CSI) at

- 8 ASTM E 2178, Standard Test Method for Air Permeance of Building Materials.
- 9 ASTM E 2357, Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
- 10 ASTM E 1186, Standard Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems.
- 11 Canadian Mortgage and Housing Corporation, www.cmhc-schl.gc.ca/.
- 12 Oak Ridge National Laboratories (ORNL), www.ornl.gov/sci/btc/search.shtm.
- 13 Air Barrier Association of America, www.airbarrier.org.

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