A building’s exterior is very similar to skin on the human body. It protects all of the building’s internal systems from the outside world. This “skin” of the building is known as the building enclosure system. It includes both the vertical (walls, windows and doors) and horizontal (roof) systems encasing the building.

The building enclosure system plays an important role in how much energy a building uses. Currently, residential and non-residential buildings account for almost 40 percent of all energy use in the United States. Improving performance can have a serious impact on energy bills, not to mention the comfort and safety of building occupants.
In 1978, the U.S. Department of Energy (DOE) initiated a national program plan to address building enclosure systems. This program evolved into one of the National Institute of Building Science's first councils, the Building Enclosure Technology and Environment Council (BETEC).

Today, DOE and more than 125 corporate and individual members support BETEC. An elected Board of Direction guides the Council. Government agency and association personnel; design and construction professionals; researchers; and academics serve on BETEC committees and working groups; propose and review research; and organize symposia and publications.

**Building Enclosure Councils**

In 2006, the Institute signed a cooperative agreement with the American Institute of Architects to establish Building Enclosure Councils (BECs) in major U.S. cities across the nation. Since then, the program has established 31 chapters, representing both cities and states. More than 3,000 affiliated architects, engineers, contractors, manufacturers and others with an interest in building enclosures participate. To see a complete list of chapters, visit www.becnational.org.

**BEST Conferences**

One purpose of BETEC is to educate the industry about building enclosure systems. With that in mind, the BETEC Board of Direction held its first biennial international conference, Building Enclosure Science and Technology (BEST1), in June 2008. The program included new research and development in fenestration, energy efficiency and durability of buildings, moisture control and indoor air quality. BEST2 was held April 12-14, 2010, in Portland, Oregon. BEST3 took place on April 2-4, 2012 in Atlanta, Georgia, and BEST4 occurred April 13-15, 2015, in Kansas City, Missouri. BEST5 will be held in April 2018 in Philadelphia, Pennsylvania. For more information, visit www.thebestconference.org

**Building Envelope Design Guide**

BETEC posts much of its information on the the Building Envelope Design Guide (BEDG), which is part of the WBDG Whole Building Design Guide® web-based portal. BEDG offers a range of technical information on below-grade systems, wall systems, fenestration systems, roofing systems and atria systems. In addition, technical information on blast safety, seismic safety, wind safety, flood resistance, indoor air quality, chemical/biological/radiological (CBR) safety, sustainability and heating/ventilating/air conditioning (HVAC) integration with building envelope systems is available.

**Building Enclosure Commissioning**


**Journal of the National Institute of Building Sciences (JNIBS)**

Every six months JNIBS has an enclosure-themed issue, for which BETEC members contribute articles concerning the intricacies of building enclosure design, construction and commissioning.