



# Butler® wall and roof system assemblies are tested for **IN-PLACE THERMAL PERFORMANCE.**

This means Butler building systems deliver the energy-efficiency that they say they will. Assembled and installed. On your building.

**Meet the Butler® Guarded Hot Box. This device can test actual 8'x10' roof or wall sections, assembled just as they would be on your building. This provides accurate, “real world” insulating information rather than the theoretical data provided by most building products manufacturers.**

## **HOW DOES IT WORK?**

The chamber has a warm and a cool side. A temperature difference typical of an actual building is created from one side of the roof or wall assembly to the other, and nearly 300 sensors measure the temperature, humidity, airflow and the energy consumed during an 8- to 12-hour test. The results are expressed in “U-factors” rather than “R-values,” and measure the amount of energy, over time, passing through the assembly. Therefore, the lower the tested U-factor, the better the result.

## **WHY IS THIS IMPORTANT?**

This information generated by the Guarded Hot Box test not only shows compliance to energy codes—it also will allow your Butler Builder® to provide extremely accurate estimates of your building's heating and cooling energy consumption and thus specify the correct size HVAC units to give you maximum energy-efficiency.

## **IS THE GUARDED HOT BOX RELIABLE?**

Yes. Butler developed the Hot Box in collaboration with these trusted contributing partners: *Bay Insulation*, the largest supplier of insulation



to the metal building industry; *Dow*, the manufacturer of rigid-foam board insulation; *Certainteed* and *Owens-Corning*, prominent fiberglass blanket insulation manufacturers; and *Lamtec Corporation*, a leading vapor barrier supplier to the metal building construction industry.

The tests are performed at the Butler Research Center to the rigorous ASTM C-1363 test standard. All test personnel, equipment, sensors, test processes and quality system conform to the ISO/IEC 17025 Standard for competency of testing laboratories and have been accredited by the International Accreditation Services (IAS), a certified and independent third party that is recognized worldwide and is one of the leading accreditation bodies in the United States.

Since October 2007, IAS also has been the accreditation service for the Metal Building Manufacturers Association (MBMA), and IAS accreditation provides evidence that laboratories and inspection agencies render competent and consistent services in line with international standards.



This IAS accreditation is your assurance that Butler-tested insulation assemblies deliver true, in-place thermal performance.