



**Subject: Technology**

Date: June 17, 2008

Thermal Visions is a world leader in research, development, and production of Vacuum - Insulation Panels (VIP).

### **Vacuum Insulation Core:**

Several years ago we developed our own vacuum insulation core material that recently allowed us to improve our performance from a thermal conductivity of 0.025 BTU-in/ft<sup>2</sup>-hr-F (3.6 mW/m-K) to a thermal conductivity 0.020 BTU-in/ft<sup>2</sup>-hr-F (2.88 mW/m-K), THRESHHOLD™ R 50. We expect in the future to make further major new improvements in performance and cost effectiveness.

### **Barrier Film:**

An extremely important component of the vacuum insulation panel is the barrier film that maintains the vacuum. We have always used the best available barrier. During the last two years we studied all available world research on barrier film technology.

Also crucial to the development of a new improved barrier film, we developed a test that can measure the changes in very high performance barriers. We have now developed by far the world's best barrier for vacuum insulation panels.

### **Energy Conservation:**

Thermal Visions is dedicated to technology advancement to make the world a better place. Our technologies allow energy conservation and reduced emissions with a product that can be recycled after it has fulfilled its purpose.

Thermal Visions will continue to develop "The Next Step".