

Background

The U.S. Department of Energy reports that louvered window shutters will help prevent heat gain and loss in an interior environment.* Mirasol® Premier Performance shutters are engineered with a closed-cellular composite material featuring an extremely rugged cap stock. The result is a beautiful and functional shutter that helps maintain energy efficiency and prevent unwanted heat loss or gain. Now, with ITA's proprietary Energy Savvy program, Mirasol Premier Performance shutters are scientifically certified to meet rigorous energy savings criteria.

The Energy Savvy program is maintained through rigorous testing using scientifically recognized protocols. Manufactured under the Energy Savvy program, Mirasol Premier Performance shutters are the first certified energy-efficient window fashion products within the ITA brand.

Energy Savvy Test Methodology

The test objective was to measure heat transfer through a fixed-size window covered by a framed Mirasol Premier Performance shutter. The shutter featured 3.5" louvers in various open positions. Test conditions created a controlled outside temperature while measuring the rise in temperature inside the test chamber. A window of 32" wide x 28" high, with clear single pane glass, was mounted in the wall between the heat and comfort sections, with the heat section warmed by infrared heat lamps of 750 watts. The heat section was brought up to 100°F, +/-1° and maintained there via digital remote thermometer. The comfort section was fitted with a circulating fan for even heat distribution and alternate heat source for elevating comfort temperature to 72°F to start each test. The comfort area temperature was recorded every 10 minutes with a remote digital thermometer until stabilized at 90 minutes.

Test Results

Sample ID: Mirasol Premier Performance Shutters

Time	Full Open	Lower Position: ½ Open	Full Closed	Test Conclusion
0 min	72.0°F	72.0°F	72.0°F	In the heat transfer test, area temperature difference between the room protected with Mirasol Premier Performance shutters closed (74.3°F) and the room with Mirasol Premier Performance shutters open (81.7°F) was 7.4°F (9%), with a corresponding reduction in energy consumption of up to 10%.
30 min	79.7°F	76.6°F	73.1°F	
60 min	81.0°F	78.0°F	73.6°F	
90 min	81.7°F	78.6°F	74.3°F	
0/All increase	9.7°F	6.6°F	2.3°F	

Energy Savvy test results for Mirasol Premier Performance shutters are determined in a controlled environment. Actual results will vary from region to region and depend on climate, type of heating and cooling system, and the type of window and exposure covered.

