

# Energy Efficient Mercury Door and Frame System

## Frequently Asked Questions

### Q. What is the energy efficient Mercury door and frame system?

A. The Mercury door and frame system consists of the Mercury door (steel reinforced foamed in place core) and the Mercury Thermally broken frame (bonded thermal break with a Pemko S44 compression type weather-stripping).

### Q. What are the main advantages of the Mercury door and frame system?

A. The Mercury Door paired with the Mercury Thermal Break frame provides R-value/U-factor and air leakage performance rates that meet or exceeds ASHRAE 189.1, ASHRAE 90.1, and NFRC standards at a lower cost than Trio-E and the riveted thermal break frame design

### Q. What are U and R values or factors?

A. R-value is how well a material insulates. The higher the R-value, the better the insulation and the more energy you will save. U-value measures how well materials conduct heat. It is essentially the inverse of the R-value. The U-value measures the rate at which heat transfers through a material over a given area under standardized conditions.

### Q. What is ASHRAE 189.1 and 90.1 standards?

A. Standard 189.1 provides total building sustainability guidance for designing, building, and operating high-performance green buildings. ASHRAE 90.1 (Energy Standard for Buildings Except Low-Rise Residential Buildings) is a US standard that provides minimum requirements for energy efficient designs for buildings except for low-rise residential buildings.

### Q. What is NFRC?

A. NFRC stands for National Fenestration Rating Council. NFRC was created to provide standardized methods for determining the windows, doors and skylight energy performance. NFRC is not a trade association but a non-profit public/private organization representing broad industry interest. NFRC standards are referenced in ASHRAE 90.1.

### Q. What is the energy and air infiltration performance of the Mercury door and frame system?

A. U-Factor of 0.37 / R-Value of 2.70 in Mercury thermal brake frame. Air infiltration of 0.10 / Air Exfiltration of 0.10

### Q. Is the Mercury door and frame durable as well as being energy efficient?

A. Yes. The Mercury door and frame both meet ANSI A250.4 endurance and performance test up to 1,000,000 cycles.

### Q. What are the available opening sizes?

A. Mercury door up to 4'0" x 9'0" single up to 8'0" x 9'0" pair. Mercury frame up to 8'0" x 8'0" maximum size.

### Q. Can the Mercury door and frame system be fire rated?

A. No. The Mercury thermal break frame is not fire rated. The Mercury door can be fire rated up to 3 hours with a fire rated frame.

### Q. How do you order the Mercury door and frame?

A. TU is the door series for the Mercury door and TQB a (double rabbet) and TRB (single rabbet) for the Mercury frame.

### Q. What hardware can be used with the Mercury door and frame?

A. All ASSA ABLOY branded hardware can be used.