

# MECHANICALS ENERGY EFFICIENCY & YOUR BOTTOM LINE



## AIR-ROTATION® TECHNOLOGY

Arizon's Air Rotation technology produces an even distribution of air throughout the building – not only from corner to corner, but floor to ceiling. This is a considerable advantage over systems that do not use this technology, considering the air structure design is not the most well-insulated type of construction and is susceptible to heat loss through the building envelope. By using our Air-Rotation technology, the temperature of the air near the top of the dome is within 1-2 degrees of the temperature at the floor level. Without Air-Rotation, the temperature at the peak of a dome of this height would be as much as 30 degrees warmer. This means that on a cold 30°F day outside, the temperature at the top of the dome would be 67°F with our dome, and 95°F otherwise. The differential temperature between inside and outside at the roof is then 37°F in our dome and 65°F without Air-Rotation. The heat loss is significantly reduced.\*

## LOW HORSEPOWER MOTOR

Arizon's low horsepower design changes the method of heating and inflation to reduce the motor size required to operate the dome. A typical example heating & pressurization unit for another's building would be 25 hp.

The operating costs for a 6-month installation for a single 25 hp motor is: 25 hp x 0.746 watts/hp x 0.7 power factor ÷ 90% efficient motor x 0.8 full load x 180 days, all this to just run the motor. Our system would use a 3 hp motor for pressurization – always on, and a 10 hp motor for heating, which operates about 25% of the time. The total operation for these two motors has a total savings of 76% versus a 25 hp motor.

*\*While these examples are provided to illustrate the values and benefits of these features, true values will vary from project to project, based on the building design, climate, insulation values and a number of other factors. Speak to your sales professional for estimates for your building.*

- 5-7 horsepower motors
- 40-70% reduction in energy usage when compared to 'off-the-shelf' mechanical equipment
- LEED certifiable
- Incorporates Air-Rotation® technology, which uses less energy and distributes temperature evenly throughout dome, reducing fuel costs
- Manufactured exclusively for air supported structures by Arizon

## OTHER ENERGY EFFICIENT FEATURES

### SKYLIGHT

BRING IN EXTRA LIGHT WITHOUT  
PAYING MORE IN ENERGY

### PREMIUM INSULATION

DOUBLE THE INSULATION WITH  
MINIMAL ADDITIONAL COST

### LED LIGHTING

USE A THIRD OF THE ENERGY OF  
METAL HALIDE BULBS

### ADVANCED CONTROLS

SCHEDULE SETBACKS FOR HIGH  
EFFICIENCY OPERATIONS

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