



COMPANY PORTFOLIO

ARIZON[®]
BUILDING SYSTEMS



THE MOST COST-EFFECTIVE CONSTRUCTION AVAILABLE

OVER
300
EMPLOYEES



**STRUCTURAL
ENGINEERS**



**MECHANICAL
ENGINEERS**



**ELECTRICAL
ENGINEERS**



**CIVIL
ENGINEERS**



DESIGNERS



ARCHITECTS

WHY CHOOSE ARIZON



OUR PRODUCTION FACILITIES

Arizon manufactures its buildings from two UL Certified production facilities totaling 180,000 square feet in the greater St. Louis region, including an 80,000 square foot air-supported building. We practice what we preach!



OUR PEOPLE

Arizon Building Systems employs a team of over 30 structural, mechanical, electrical and civil engineers, as well as on-staff designers, architects, project managers and construction managers. Our experienced and diversified staff will help guide your project from concept to completion.



OUR SUPERIOR TECHNOLOGY

Arizon is the only fabric building system company that also manufactures its own inflation, heating, and cooling units—making our systems much more durable and energy efficient than our competitor's conventional systems. Our HVAC system also ensures even temperatures throughout the space, eliminating any cold corners in the winter.



ARIZON[®]

THE POWER OF THREE COMPANIES



Since 1921, Johnson Air- Rotation HVAC Systems has been a leading manufacturer of HVAC products for many other large, open-spaced industrial buildings. Johnson's revolutionary Air-Rotation technology offers the most efficient way to heat, cool and ventilate open-span buildings.

CUSTOMERS INCLUDE:



Since the 1970s, MarCraft Custom HVAC Systems has been a leading supplier of highly-custom HVAC equipment. MarCraft's engineers take a "blank sheet of paper" approach to creating mechanical solutions to its clients' wide range of challenging heating and cooling needs.

CUSTOMERS INCLUDE:



Arizon Building Systems is the recognized expert in the fabric building industry, providing a variety of services worldwide. The Arizon team is led by the most knowledgeable and motivated people in the industry, as several of our key personnel have more than 25 years of experience.

CUSTOMERS INCLUDE:



PROJECT SPOTLIGHT

WASHINGTON COMMANDERS



This Dome Features:



Translucent
Fabric



HVAC



Enhanced
Branding



LED
Lighting



Triple Wall
Construction

Location:
Washington, D.C.

Challenge

- The Washington Commanders was looking to upgrade their previous air-supported dome to a newer model with advanced safety features.
- Arizon was tasked to design, manufacture, and install the team's 100,800 square foot practice facility in time for their mini-camp a few months away.

Solution

- Arizon's engineering and design team met daily with the manufacturing team and worked overtime in order to construct the dome in the team's desired timeline. The install team began work on-site in May.
- Translucent fabric reduced the need for artificial day-time lighting and along with triple wall insulation this helps keep operational costs down.
- Technology in the dome included an LED lighting system, a surround sound mounted speaker system, and mounted video cameras.
- Along with the technology being mounted to the walls/ceiling of the air-supported building the team also had goal post suspended allowing for more floor space.

Result

- Arizon completed the project on time and delivered a new state-of-the-art practice facility.
- The team's ownership and executive team toured the facility prior to the players entering the fields and were very impressed.

Application: NFL Practice Facility

Features:

- Mounted Cameras
- Surround sound mounted speaker system
- Field goal posts suspended from ceiling

Dome Size: 220' x 420'
100,800 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:

(800) 325-1303

facebook.com/ArizonBuildingSystems

linkedin.com/company/arizon-building-systems

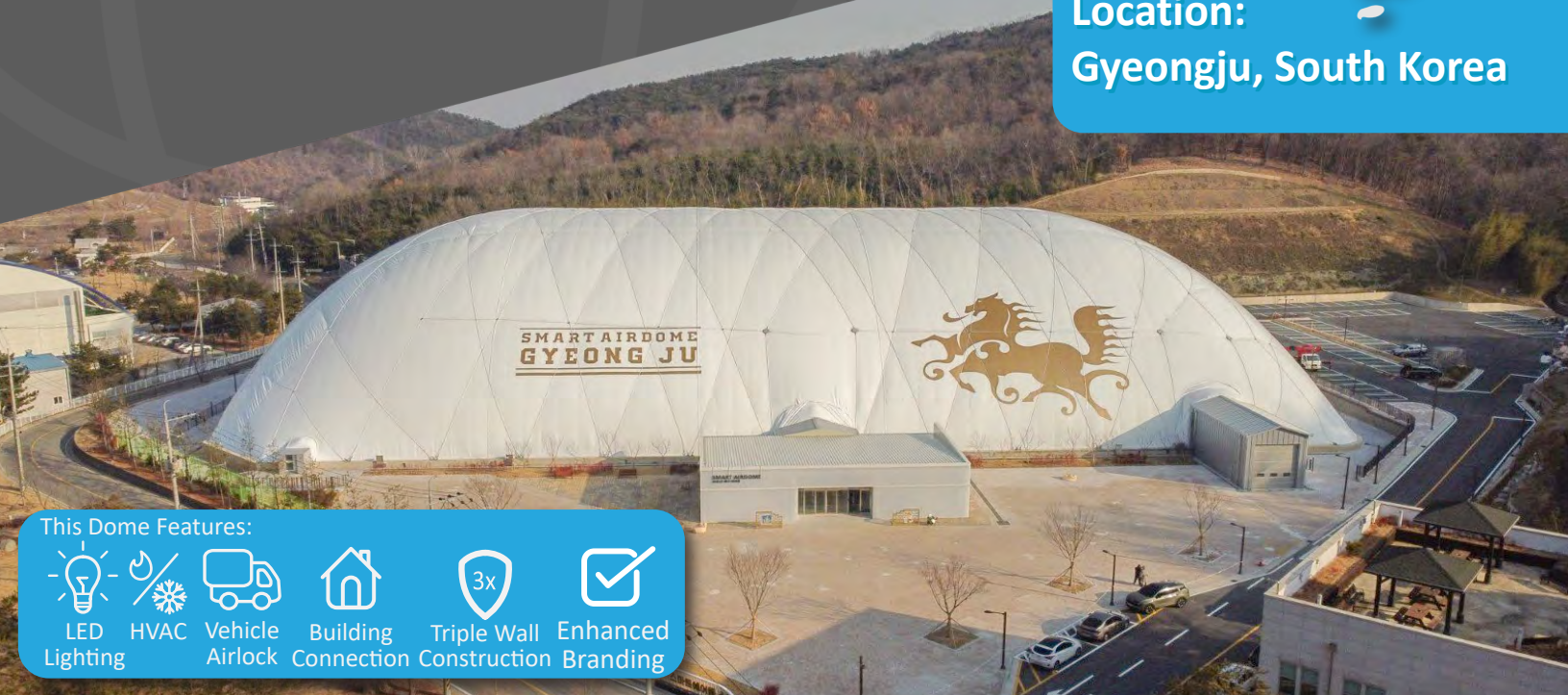
PROJECT SPOTLIGHT

ARIZON INTERNATIONAL

SMART AIRDOME GYEONG JU



Location:
Gyeongju, South Korea



This Dome Features:

- LED Lighting
- HVAC
- Vehicle Airlock
- Building Connection
- Triple Wall Construction
- Enhanced Branding



Dome Size: 255' x 395'
100,725 sq ft

ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:

- (800) 325-1303
- facebook.com/ArizonBuildingSystems
- linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

COLUMBIA UNIVERSITY

Location:
New York City, NY



This Dome Features:



Dome Size: 243' x 382'
92,800 sq ft

Columbia University chose Arizon to construct a state-of-the-art seasonal sports dome at Rocco B. Comisso Soccer Stadium in Manhattan. The dome is used as an indoor practice facility for varsity sports teams as well as intramural programs sponsored by the Ivy League university. The 92,826 square foot space offers energy-efficient features such as Arizon's Air Rotation heating system, LED lighting, and a translucent skylight that eliminates the need for artificial lighting during daylight hours.



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:

(800) 325-1303
facebook.com/ArizonBuildingSystems
linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

ARIZON INTERNATIONAL

EDMONTON SOCCER DOME



Location:
Edmonton,
Alberta, Canada



This Dome Features:



LED
Lighting



Dome +
Technology



HVAC



Skylight



Enhanced
Branding



Triple Wall
Construction



Vehicle
Airlock



Dome Size: 270' x 500'
135,000 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

ARIZON INTERNATIONAL

WATERLESS GREEN



Location:
Doha, Qatar

This Dome Features:



Triple Wall
Construction



Enhanced
Branding



Cooling



LED
Lighting



Dome Size: 345' x 210'
72,450 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

CLAYVIEW COUNTRY CLUB

Location: 
Kansas City, MO

This Dome Features:



LED
Lighting



Skylight



Building
Connection



CLAYVIEW
Racquet • Swim • Social



Dome Sizes:

108' x 117' • 12,636 sq ft

114' x 198' • 22,648 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

THE CLUB AT NEW SEABURY

Location:
Cape Cod, MA

This Dome Features:



LED
Lighting



HVAC



Skylight



Dome Size: 120' x 204'
24,480 sq ft

ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

PARKWAY BANK SPORTS COMPLEX

Location:
Chicago, IL



This Dome Features:



Challenge

Construct a single air-supported building large enough to enclose two regular size softball fields and an area for batting and pitching cages.

Solution

Arizon designed, manufactured & installed the 140,000 sq. ft. open-span facility, which features an open turf area for recreational activities and a separate space for batting cages.

To conserve energy and offset operating costs, the dome includes a center skylight system and a high-efficiency HVAC system.

The air-supported building is directly attached to a conventional structure that serves as a lobby and concession stand.

Gray exterior fabric was chosen to blend in with the surrounding buildings.

Result

The Parkway Bank Sports Complex dome is one of the Village of Rosemont's featured attractions, which is rented out to leagues, teams, and community groups- bringing in more than a million dollars in revenue each year.

The Chicago Bandits Professional Women's Softball Team also uses the complex as the practice facility and hosts various camps, clinics, and events like "Banditfest" in the structure.

After the installation, the Village of Rosemont obtained Parkway Bank as a sponsor, giving them naming rights to the dome. Arizon installed two adhesive graphics to enhance the branding of the facility.



Dome Size: 250' x 565'
141,250 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:

(800) 325-1303

facebook.com/ArizonBuildingSystems

linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

MATCHPOINT NYC

Location:
New York City, NY

This Dome Features:



LED
Lighting



HVAC



Skylight



Enhanced
Branding



Building
Connection



MatchPoint
NYC



Dome Size: 108' x 476'
51,400 sq ft

ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

WESSEN INDOOR TENNIS

Location:
Detroit, MI



This Dome Features:



Seasonal
Install



Heating



LED
Lighting



Skylight

WESSEN INDOOR
TENNIS
CLUB
Play BIG.



Dome Size: 118' x 348'
41,000 sq ft

ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

CITY OF MARCELINE POOL DOME



Location:
Central Missouri

This Dome Features:



Translucent
Fabric



Heating



Seasonal
Install



Building
Connection

The City of Marceline, Missouri worked with Arizon to construct a seasonal dome over its existing swimming pool. Installing the dome over permanent obstacles, such as two water slides, was of key importance. Arizon added reinforced lifting sections as part of the dome's fabric membrane design to help facilitate installation over the slides. The Marceline community can now enjoy year-round swimming with the pool dome installed for the winter season.

Dome Size: 91' x 116'
10,550 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

PROJECT SPOTLIGHT

VOLLEYBALL BEACH OZARK



Location:
Ozark, MO

VOLLEYBALL BEACH OZARK

This Dome Features:



Seasonal
Install



Heating



Translucent
Fabric



LED
Lighting



Building
Connection



Dome Size: 160' x 250'
40,000 sq ft



ARIZON[®]
BUILDING SYSTEMS



ArizonBuildingSystems.com

Connect with Us:



(800) 325-1303



facebook.com/ArizonBuildingSystems



linkedin.com/company/arizon-building-systems

ARIZON BUILDING SYSTEMS

KEY FEATURES & BENEFITS



1. LOW INITIAL INVESTMENT

The average cost of an air-supported building is typically 1/3 the cost of a conventional building of the same size.



2. LOW OPERATING COSTS

Arizon uses highly translucent fabric, which allows for natural lighting, reducing or eliminating daytime lighting costs. In addition, Arizona offers several insulation options to reduce heating and cooling costs, when paired with our efficient heating and cooling systems.



3. TAX BENEFITS AND ACCELERATED DEPRECIATION

An Arizona air-supported building offers a number of financial benefits in addition to low cost-per-square-foot upfront pricing. There are important tax and depreciation benefits to consider when comparing an air-supported building to other types of construction. Such benefits may make an air-supported building more attractive, especially for new businesses. In some jurisdictions, operators are only liable for paying property taxes on their land, not on the dome itself.



4. ENORMOUS UNOBSTRUCTED COLUMN FREE SPACE

Air structures can span many acres without columns, pillars or posts- creating large, unobstructed, weather-proof spaces. Many of our larger buildings feature roofs in excess of 85 feet.



5. RAPID CONSTRUCTION SOLUTION WITH FLEXIBILITY

Air-supported buildings can be erected in mere days at the job site with minimal site preparation; turn-key construction achievable in less than 10 percent of the time of conventional buildings. Arizona's buildings can be installed either seasonally or permanently, and can be transported to other sites if necessary, with relative ease.



6. COMFORT

Our custom-manufactured air handling equipment evenly conditions the interior of an air-supported building, ensuring no drastic temperature differences and maximal comfort during any season. Our in-house team of mechanical engineers designs each system to meet the unique demands of each customer including building use, occupancy, local climate, and many more factors.

OUR DOME IS YOUR CANVAS



**CUSTOM
SIZING &
SHAPES
AVAILABLE**

**GENERATE REVENUE BY
SELLING NAMING RIGHTS!**



**ARIZON HAS MANY
OPTIONS FOR
ENHANCED BRANDING
AND GRAPHIC DISPLAY**

OPTIONS INCLUDE:

- CUSTOM FABRIC COLORS
- LOGO BANNERS
- HIGH RESOLUTION PHOTO BANNERS

Arizon has recently built more gray and khaki color domes that show less wear over time and blend into the environment better than white exterior domes. Arizon offers a variety of exterior solutions to fit the needs of the surrounding environment, including multi-color patterns and contrast-color skirting on the lower 20 feet of the dome.

FREQUENTLY ASKED QUESTIONS

ARE AIR-SUPPORTED DOMES EXPENSIVE TO OPERATE?

While many older air-supported domes could be expensive to operate, newer systems come much closer to matching the energy consumption seen in conventional structures. In fact, Arizon buildings are frequently less expensive to operate than conventional buildings of the same size due to a variety of design features, including natural lighting, the design of the HVAC system, less surface area and minimal ongoing maintenance costs.

IS IT SAFE TO BE INSIDE OF AN AIR STRUCTURE?

Arizon's air structures are always designed and engineered to the same building code standards as other forms of construction. Typically, a local authority will adopt a particular year's version of the International Building Code (IBC) to form the basis of its own building codes and regulations. The IBC contains sections that specifically apply to air-supported structures, and Arizon will always refer to these when designing its buildings.

WHAT ABOUT BAD WEATHER? IS IT DANGEROUS TO BE INSIDE AN AIR STRUCTURE DURING A BAD STORM OR BLIZZARD?

The International Building Code considers winter weather and severe wind events when establishing its standards, which Arizon fully meets or exceeds. Arizon's engineers take great care to ensure that the building's foundation, cable system, and air handling system are all designed to withstand harsh weather, just like any other type of building.

WHAT HAPPENS IF THERE'S A FIRE, WILL THE FABRIC BURN?

The fabric passes all relevant fire rating tests and for all practical purposes is not a danger to catch on fire or spread a fire. If a fire were to occur from something else within the building, anyone inside of the dome would be urged to exit via any of several emergency exit doors located around the building's perimeter.

DO I NEED TO INCLUDE A SPRINKLER SYSTEM?

The local government will ultimately be responsible for issuing occupancy permits in relation to fire code, however it is generally not necessary for air structures to include a sprinkler system due to the inflammability of the fabric, open nature of the interior space, and even distribution of emergency exit doors around the building's perimeter. Occasionally, building operators will need to include an above average number of pull-boxes or fire extinguishers as an additional step to address fire code concerns.

ISN'T THE BUILDING JUST FABRIC? CAN'T SOMEONE CUT THROUGH IT?

The building's membrane is made of either two or three layers of architectural fabric with several inches of 'dead air space' between the layers of fabric. On its own, the fabric is quite strong and not easily torn or cut, and once inflated the fabric becomes even stronger. Because of this, the fabric is very difficult to vandalize and even if someone were able to penetrate the exterior layer, they would still have to cut through a second or third layer to reach the inside. If, for instance, someone made a slice all the way through to the interior, the dome would still not deflate. The controls system on the air handling equipment would detect the air loss and immediately ramp up the output of the inflation fan to maintain optimal pressure.

WHAT ABOUT HAIL?

Hail will neither structurally nor cosmetically damage the dome.

FREQUENTLY ASKED QUESTIONS

CONTINUED...

HOW LONG DO AIR STRUCTURES LAST?

Arizon's air handling system is designed for a 30+ year lifespan, while the fabric is designed for a 20-30 year lifespan. The fabric types that Arizona uses now include a 20 year warranty.

WHAT HAPPENS IF THE POWER GOES OUT?

Every Arizona dome includes a backup power generator that is manufactured by a reputable company. This generator will kick on automatically in the event of a power outage to continue powering the inflation system to keep the building up and running. In North America, these generators are typically connected to a natural gas line, but diesel generators are also an option.

ARE AIR STRUCTURES TAXED AND DEPRECIATED LIKE A NORMAL BUILDING?

No.* Air structures are almost always classified as equipment or personal property instead of real property, which is what most buildings and real estate are classified as. Because of this, these buildings also depreciate much faster than other forms of construction (typically 7 years for air structures vs. 39 years for real property). The land and any other improvements would still be taxed as usual.

**This information is intended for general discussion only. Taxes may be enforced differently based on jurisdiction. Please consult an accounting or tax professional for the most accurate information based on your business and location.*

WHAT IF THE POWER GOES OUT AND THE BACKUP GENERATOR DOESN'T WORK, DOES THE BUILDING JUST COLLAPSE?

Arizona recommends frequent testing of the backup generator to make sure this doesn't happen. However, if the power goes out and the gas line is shut off and the generator can't operate, the building will begin to slowly deflate before gently falling to the ground. The time this takes depends on the size of the building and how many doors have opened, but there would be ample time for everyone in the space to calmly and casually walk out before the building would fully deflate.

DO THESE BUILDINGS HAVE TO BE RECTANGULAR?

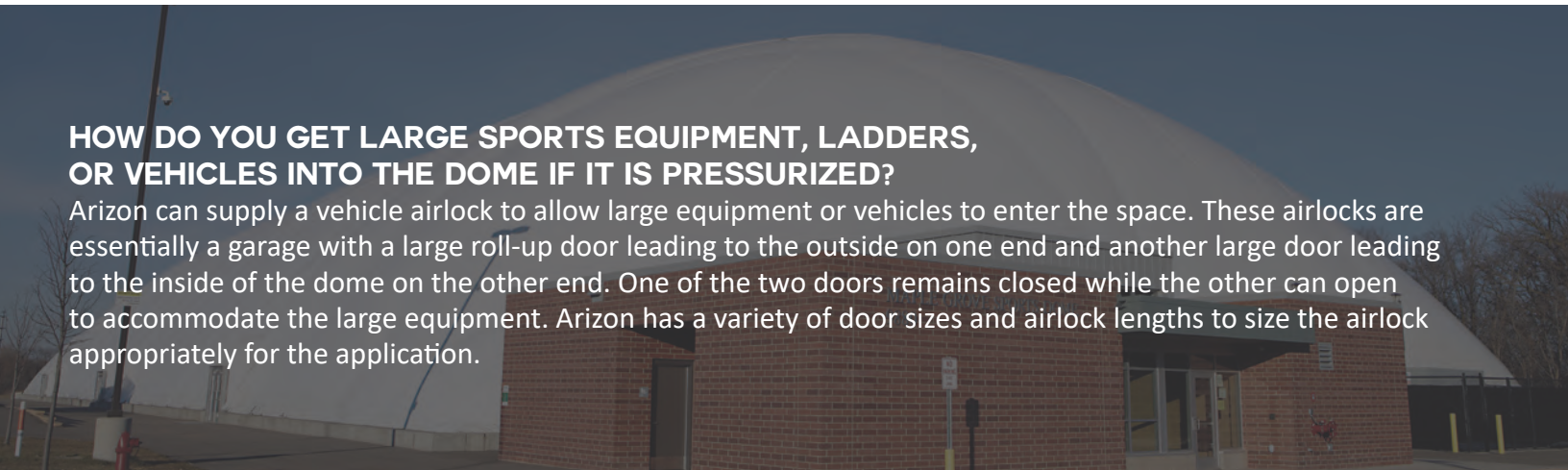
No. Arizona has constructed air-supported structures in a variety of circular and trapezoidal shapes. The only general restriction is that we try to avoid shapes with inside corners (or L-shapes).

HOW LONG DOES IT TAKE TO MANUFACTURE AND INSTALL?

Arizona generally needs about 16 weeks to design and manufacture the building (4 weeks to design, 12 weeks to manufacture). Site construction work will usually take place at the same time the building is being manufactured. Once site work has finished and the building has arrived on site, the actual installation will take between 1 and 4 weeks depending on the size of the dome.

HOW DO YOU GET LARGE SPORTS EQUIPMENT, LADDERS, OR VEHICLES INTO THE DOME IF IT IS PRESSURIZED?

Arizona can supply a vehicle airlock to allow large equipment or vehicles to enter the space. These airlocks are essentially a garage with a large roll-up door leading to the outside on one end and another large door leading to the inside of the dome on the other end. One of the two doors remains closed while the other can open to accommodate the large equipment. Arizona has a variety of door sizes and airlock lengths to size the airlock appropriately for the application.



FREQUENTLY ASKED QUESTIONS

CONTINUED...

HOW MUCH DO AIR STRUCTURES COST?

Pricing is determined by a number of factors in the design of the building, and because each project is different we urge you to contact an Arizon Building Systems sales professional to discuss budgetary information. With that said, our air-supported structures are typically one-third to one-half of the cost of a similarly-sized pre-fabricated metal building once components and services such as HVAC, lighting, freight and installation of the building are factored in. Generally speaking, the cost per square foot will drop as the project size increases.

HOW LOUD ARE AIR STRUCTURES, WILL THE NOISE DISRUPT THE WHOLE NEIGHBORHOOD?

The noise that the air handling equipment produces is entirely dependent on the components that are included. With that said, Arizon uses low horsepower fans to inflate its buildings, which accordingly are much quieter to operate than higher horsepower alternatives. When measured from a few feet away, our air handling systems consistently register decibel readings of less than 65db, which is about the same level as normal conversation and less than most dishwashers. Additional measures can be taken to lower the sound further.

WHAT ARE THESE BUILDINGS TYPICALLY USED FOR?

A majority of Arizon's projects are for sports and recreation applications such as tennis, swimming, volleyball, soccer, football, lacrosse, and baseball. Arizon also manufactures some domes for convention, exposition and worship spaces, as well as warehousing, environmental, and temporary construction enclosures.

CAN THESE BUILDINGS BE INSTALLED TEMPORARILY OR ON A SEASONAL BASIS?

Our air structures aren't usually built for a temporary need due to financial reasons, however many of our buildings are installed and dismantled on a seasonal basis. Seasonal installations are especially common for tennis and swimming applications, while larger soccer or football field sized buildings are mostly installed on a permanent basis, with a few exceptions.

HOW TALL ARE AIR STRUCTURES?

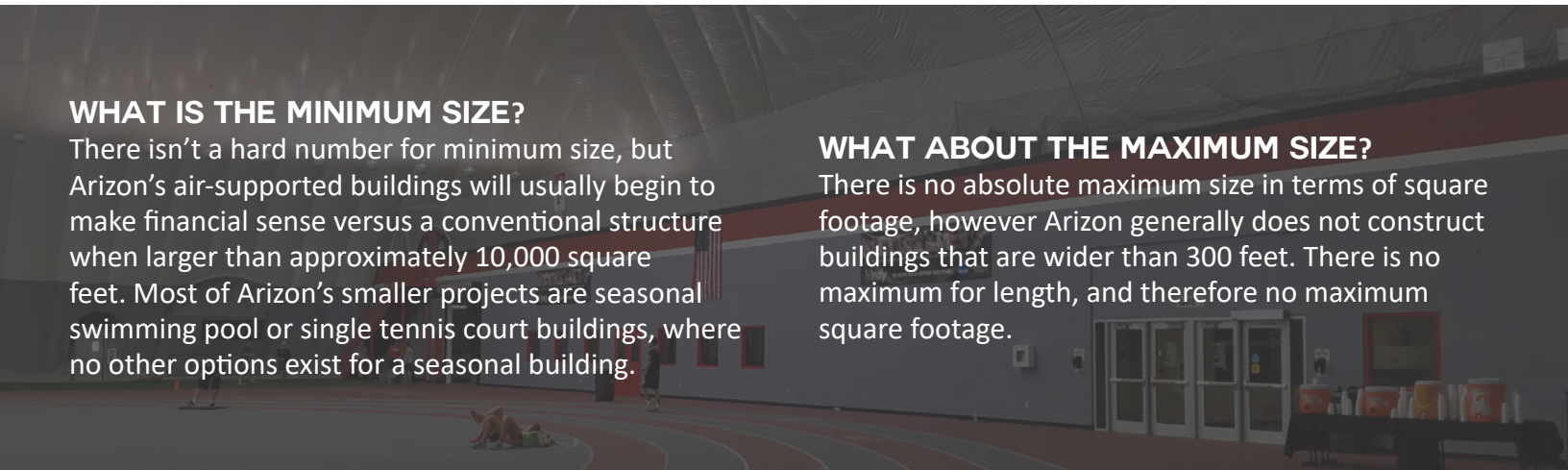
The height of Arizon's air structures is approximately one-third of the width of the building, with the option to increase the height up to half of the width, if needed. We keep to this width to height ratio to maintain an optimal slope for wind deflection and snow shedding purposes. Therefore a 200' wide by 400' long building would have a height of approximately 66', with the ability to increase to up to 100', if desired.

WHAT IS THE MINIMUM SIZE?

There isn't a hard number for minimum size, but Arizon's air-supported buildings will usually begin to make financial sense versus a conventional structure when larger than approximately 10,000 square feet. Most of Arizon's smaller projects are seasonal swimming pool or single tennis court buildings, where no other options exist for a seasonal building.

WHAT ABOUT THE MAXIMUM SIZE?

There is no absolute maximum size in terms of square footage, however Arizon generally does not construct buildings that are wider than 300 feet. There is no maximum for length, and therefore no maximum square footage.



THE ARIZON DIFFERENCE

JOHNSON AIR-ROTATION® TECHNOLOGY

Our UL listed and approved systems incorporate Arizon Companies' Johnson Air-Rotation technology, which reduces energy consumption while evenly heating or cooling a facility from corner to corner and from floor to ceiling.

- ✓ Even Temperatures
- ✓ Less Energy Consumption
- ✓ Reduced Heat Loss



FAN SYSTEM

Our system uses a dual fan design for maximum energy efficiency. An ultra-low horsepower fan runs 24/7 to inflate the facility, while a slightly higher horsepower fan kicks on at intervals to force warm or cool air into the dome. Our system also comes with third backup fan.

- ✓ Up to 7x More Efficient v. Other Systems
- ✓ Quiet Operation
- ✓ No Ductwork

SOPHISTICATED CONTROLS

Our in-house controls team will design a system for your dome that is easy to program and accessible from an on-site office or a smartphone anywhere in the world.

- ✓ Web-Based Controls
- ✓ Intuitive Scheduling Interface
- ✓ Wind & Snow Sensors



FABRIC SKYLIGHT

Many of Arizon's air-supported buildings feature a fabric skylight design that utilizes translucent fabric over the center of the dome. Many seasonal domes use fully-translucent fabric that brings in even more light and takes advantage of the heat gain during the winter.

- ✓ Natural Light During the Day
- ✓ No Need for Artificial Light During Daytime Hours
- ✓ Minimizes Solar Heat Gain During the Summer

FABRIC PROPERTIES



PVDF COATING

The PVDF top coating provides outstanding protection as opposed to being laminated, it is a chemical that becomes an integral part of the PVC finish, allowing for long-term durability without potential delamination.

DURABLE & WEATHER RESISTANT

The base cloth is woven from high tensile strength polyester yarn and is anti-wick treated. The flexible PVC coating also provides exceptional weather resistance.

CLEANABLE & NON-STICK

PVDF-coated exterior top coating also has excellent resistance to dirt, dust and mildew.

LIGHT TRANSMISSION & ENERGY EFFICIENCY

Arizon's PVDF-coated exterior architectural fabric is available in translucent (which allows up to 12% light transmission, reducing the need for artificial daytime lighting) or opaque (which helps block radiant heat in warmer climates).

FABRIC AS A BUILDING MATERIAL

Using heavyweight, high strength, coated fabric helps to ensure a long-life structure. In order to extend the fabric life and help maintain the cleanest possible building, specialty top-coatings are used in the exterior fabrics. These topcoats are designed to protect the PVC from degradation by UV rays, weather, direct and pollution.

SAFETY & BUILDING CODES

This fabric meets standard building codes, passes NFPA 701 requirements for building materials, is fire resistant, self-extinguishing and has extremely low smoke development ratings. UV inhibitors have extended the life of these fabrics to up to 20+ years.

COLORS & TRANSLUCENCY

Arizon's exterior fabrics come in a number of colors upon request. Our clients may also choose between translucent fabric, opaque fabric or a combination of the two in our skylight feature.



THE ARIZON SKYLIGHT SYSTEM ALLOWS NATURAL LIGHT TO ENTER THE DOME DURING DAYTIME HOURS, SIGNIFICANTLY MINIMIZING OR ELIMINATING THE NEED FOR ARTIFICIAL LIGHTS TO BE ON DURING THE DAY AND RESULTING IN SIGNIFICANT OPERATING COST SAVINGS. THE SIZE OF THE SKYLIGHT IS CUSTOM DESIGNED TO MEET EXACT SPECIFICATIONS.

ABOUT FABRIC TRANSLUCENCY

The use of translucent fabrics and construction has a major impact on reducing energy costs when operating an air structure. Translucent fabrics allow natural light into the structure during daylight hours, minimizing or even eliminating the need for artificial lighting. While opaque fabric requires artificial lighting, it does not allow solar heat gain during the day.

To take advantage of the benefits of both fabric options, Arizon’s high tech skylight system provides the natural lighting from translucent fabric with the insulative properties of opaque fabric.

THE ARIZON SKYLIGHT SYSTEM

- Offsets Lighting Costs
- Aesthetically Pleasing
- Saves Energy



	TRANSLUCENT	OPAQUE	OPAQUE W/ SKYLIGHT
TOP COATING	Acrylic top coat makes opaque & translucent resistant to UV rays, harsh weather conditions, dirt and pollution.		
FLAME RESISTANCE	Flame resistant fabric that meets NFPA-701, ASTM-E84, CSFM, AS1530.		
LIGHT TRANSMISSION	12% light transmission allows for natural sunlight to enter the dome during daytime hours to offset lighting costs.	Natural light cannot permeate exterior fabric, requiring the need for artificial lighting while the dome is in use.	Natural lighting is transmitted through the top of the dome, reducing the need for artificial lighting during daylight hours.
LIGHT POLLUTION	Produces minimal light pollution caused by the dome at night.	Blocks any possible light pollution that could be caused by the dome after dark.	Produces minimal light pollution after dark from the top of the dome.
INSULATION	Optimizes solar heat gain during the winter months during the day.	Optimal for domes situated in extreme climates that need air conditioning, as this design eliminates solar heat gain caused by natural sunlight and provides added insulation.	“Best of both worlds” approach. Provides a moderate amount of insulation, blocking some of the sun’s rays during daytime hours without sacrificing natural lighting.

LOW BIAS CABLE SYSTEM



**MEETS OR EXCEEDS
ALL LOCAL BUILDING
CODES; 20 TIMES THE
MINIMUM SAFETY FACTOR
REQUIRED BY CODE**

**CAN BE USED FOR
SEASONAL OR PERMANENT
APPLICATIONS**

**EFFICIENTLY SHEDS SNOW
IN BLIZZARD CONDITIONS**



DIAMOND DESIGN

The cables in the Low Bias Cable System form a diamond shaped pattern on all four sides of the air-supported building so that a significant portion of the dome's structural load is carried by the exterior cable system versus the fabric, itself.

ENHANCED SUPPORT VS. RADIAL SYSTEMS

Arizon's Low Bias System offers a higher wind design vs. radial systems and a minimum 25 psf snow load vs. the 5 to 7 psf snow loads common for radial designs.

EFFICIENT SNOW SHEDDING

Arizon's Low Bias Cable System is designed with severe winter weather in mind. The Low Bias design offers a considerable advantage in structural stability during heavy snowfalls versus radial designs, and allows for more efficient snow shedding versus full bias designs that contain extra cabling that can trap heavy snow and prevent it from sliding off of the building.

AIR-HANDLING EQUIPMENT



CUSTOM MANUFACTURED AIR HANDLING SYSTEM

Arizon is the only company in the industry that designs and builds its air handling systems in-house. The structural integrity of an air-supported building is dependent upon the system inflating the building, which is why it is so important to pair each building with a reliable, efficient air handling system.

As part of the engineering phase of each project, Arizon's team of mechanical engineers studies and carefully analyzes each facility's unique needs in terms of building size, local climate, use, occupancy and other important factors to design a system to efficiently heat and/or cool the dome's interior while ensuring the building stays in operation under any circumstance.

Arizon does not use off-the-shelf or foreign pre-packaged equipment intended for other types of construction. Each Arizon air handling system is manufactured in St. Louis, MO, USA.

AIR-ROTATION® TECHNOLOGY

Arizon's UL listed and approved air handling systems incorporate Johnson Air-Rotation® HVAC Systems technology, which reduces energy consumption while evenly heating or cooling a facility from corner-to-corner and from floor-to-ceiling. Air-supported buildings are naturally more susceptible to heat loss in the winter than other types of construction because of lower insulation values. Because of this, it is important to ensure that warm air stays near the surface where the building is occupied instead of rising near the roof where temperatures can be as much as 30°F higher in buildings that do not feature Air-Rotation technology.

DESIGNED FROM THE GROUND UP

Arizon's team of engineers and project managers will work with local construction resources to construct a concrete pad for the air handling equipment to be placed on, with natural gas and electrical utilities available nearby. This mechanical pad can be left open or fenced off and enclosed with any number of finishes, including a faux stone material that Arizon offers.

KEEP YOUR COOL

A majority of Arizon's permanently-installed buildings now feature air conditioning for the warm, summer months. For these facilities, Arizon will provide cooling equipment appropriate for the building's size and the area's climate. A condensing unit will be placed on the mechanical pad next to the air handling system on these buildings. Seasonally-installed domes or facilities without cooling systems will not feature this equipment.



ARIZON LED LIGHT FIXTURE



271 WATT 4-MODULE

TECHNICAL SPECS:

- 271 WATTS
- OUTPUT - 43,277 LUMENS
- 159 LUMENS/WATT
- UP TO 10 YEAR LIMITED WARRANTY
- L70 PREDICTED LIFE IS MORE THAN 200,000 HOURS
- 95% LUMEN MAINTENANCE AT 60,000 HOURS

459 WATT HIGH OUTPUT 6-MODULE

TECHNICAL SPECS:

- 459 WATTS
- OUTPUT - 73,681 LUMENS
- 161 LUMENS/WATT
- UP TO 10 YEAR LIMITED WARRANTY
- L70 PREDICTED LIFE IS MORE THAN 200,000 HOURS
- 95% LUMEN MAINTENANCE AT 60,000 HOURS



LED LIGHT FIXTURE

UL & CE LISTED

INDIVIDUALLY REPLACEABLE
LIGHT BARS

5000K COLOR TEMPERATURE

WIDE DISTRIBUTION

CLEAR LENS

120-277 VOLTS

CABLE-READY MOUNTING

0-10 VOLT DIMMING READY

OCCUPANCY SENSORS AVAILABLE

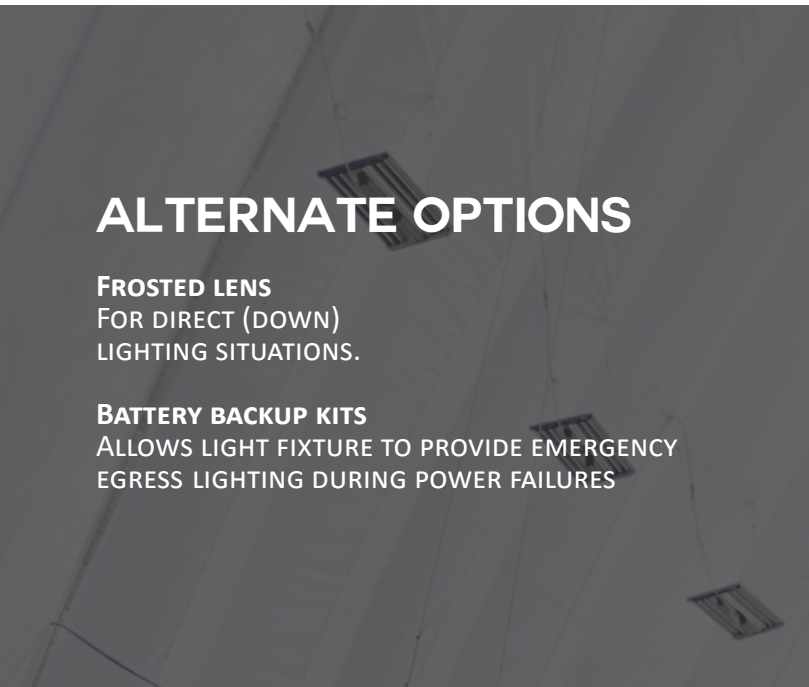
6 FT. CORD WITH 277V
TWIST-LOCK PLUG

INTEGRATED EMERGENCY BATTERY
BACKUP AVAILABLE

ALTERNATE OPTIONS

FROSTED LENS
FOR DIRECT (DOWN)
LIGHTING SITUATIONS.

BATTERY BACKUP KITS
ALLOWS LIGHT FIXTURE TO PROVIDE EMERGENCY
EGRESS LIGHTING DURING POWER FAILURES



DOORS & AIRLOCKS

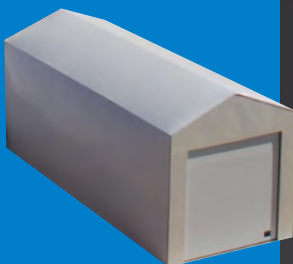


VEHICLE AIRLOCK

Large equipment, vehicles and trucks can be safely brought into an air-supported buildings by the use of a vehicle airlock system. Two large overhead doors at each end of an air-tight, fabric corridor are coordinated so that only one high-strength automatic door may be open at a time, as to not compromise the dome's internal pressure.

VEHICLE AIRLOCK SYSTEMS ARE IDEAL FOR:

- Recreational applications that use bleachers, large equipment, goal posts, or vehicles (ie. Zamboni).
- Industrial applications where large trucks, equipment, supplies, waste or chemicals are required.
- Agricultural applications where livestock, grain and other goods and equipment are stored.
- Storage and distribution centers.
- Retail, commercial & expo centers that require large displays, booths, or product inventory.



LARGE THREE-LEAF REVOLVING DOORS

Revolving doors must be specially built to withstand the building pressure pushing in both directions on the panels without fatigue failure. Brush seals minimize air losses while maintaining smooth operation. The doors include large glass panels to see other users, and the housing is made from maintenance free aluminum.



PERSONNEL AIRLOCKS

Personnel airlock doors are used for disabled individual access, but are also useful for hand-truck deliveries. Two doors are built in a frame with a short connecting tunnel creating an airlock system, thereby maintaining the building pressure and minimizing air loss. The frame and doors are also built from aluminum for long life and include vision panels for safety.



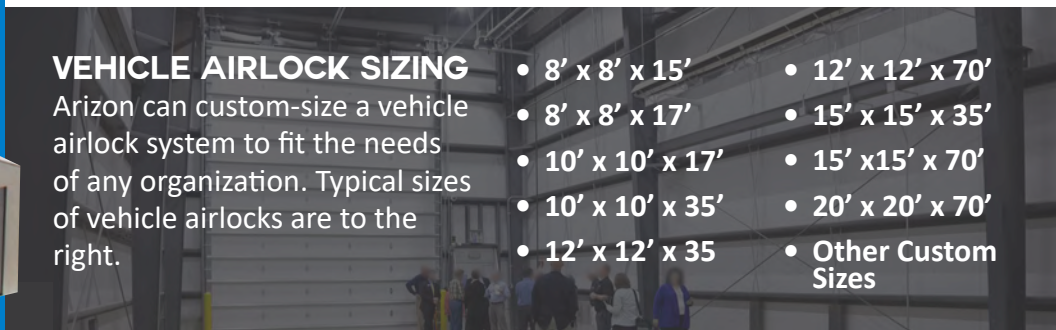
EMERGENCY EXIT DOORS

The emergency exit doors are specially designed pressure balanced center-pivot doors so that the building pressure does not act against the user when opening or closing the door. In fact, the doors are self closing even with a positive building pressure, since the pressure on the door is balanced on each side of the center hinge. These can be designed to be a double emergency exit door, where larger items can be brought into the dome.

VEHICLE AIRLOCK SIZING

Arizon can custom-size a vehicle airlock system to fit the needs of any organization. Typical sizes of vehicle airlocks are to the right.

- | | |
|-------------------|----------------------|
| • 8' x 8' x 15' | • 12' x 12' x 70' |
| • 8' x 8' x 17' | • 15' x 15' x 35' |
| • 10' x 10' x 17' | • 15' x 15' x 70' |
| • 10' x 10' x 35' | • 20' x 20' x 70' |
| • 12' x 12' x 35' | • Other Custom Sizes |





COME VISIT ST. LOUIS



ARIZON[®]

COMPANIES

TRUSTED BY THE LARGEST COMPANIES WORLDWIDE



ARIZONBUILDINGSYSTEMS.COM

(800) 325-1303 | 11880 DORSETT ROAD, ST. LOUIS, MO 63043