



Cost Efficient, Energy Saving Inflatable Dome Structures.

"Swim all year long!"



For nearly 30 years we have been designing and manufacturing vinyl-fabricated products for many varied applications. The knowledge and experience we have accumulated over this period of time has enabled us to become the nations leading supplier of residential and commercial swimming pool domes.

We would like to invite you, as a potential Commercial Ameri-Dome customer to take full advantage of the expertise we offer from our years of experience. We believe it is our job to help you make an educated decision when it comes to purchasing an inflatable dome structure.

We are specialists at design and engineering of inflatable dome structures. Whether you need advice on basic decisions such as color selection, dome heating and lighting options or the more complicated topics of required wall heights and deck clearances required in various regions of the country, we can help.

We are proud of the fact that many of the options currently available for the commercial dome industry as a whole have been designed, engineered, and tested by Ameri-Brand Products.

If your situation requires a creative solution, Ameri-Brand Products can usually accommodate your needs. If we are unable to serve your needs we can, in most cases, refer you to a reputable source that can help you achieve your goals.







## Materials

Ameri-Domes are constructed with an 18.5 oz. per square yard polyester based PVC coated vinyl. This product is coated on both sides and is UV stabilized to provide many years of durable service. It is comparable to the material used in the manufacture of commercial river rafts. Our vinyl is fire resistant and a certification to provide to your local code inspectors is available if needed.

### Color Selection

Our Commercial Domes are available in 14 different colors. The top of the dome and walls can be constructed in any of the 14 colors. White, light blue and tan are stock colors. The other colors are special order and carry a 10% upcharge. Clear walls and tops are not available. Color selection affects interior warmth during daylight hours. Samples are available.



# Shapes

Most custom shapes can be accommodated. Over the years we have made pool domes for many different shapes of pools. We specialize in fitting pools of any shape with a dome which will provide many more months of swimming throughout the year. With our AB Verifier program and measuring software we can plot the shape of your dome to within the inch of the configuration you desire.



**Options** 

### Dome Heating

If your installation is located in an area where fall, winter, or spring temperatures reach 45 degrees Fahrenheit (or below) you may want to consider a dome heater to encase your blower(s). With a dome heater the air entering the dome for support will be approximately 70 degree Fahrenheit instead of the actual outside temperature. This makes the swimming experience much more enjoyable and reduces unsafe fogging while creating an environment where the air is less humid and, therefore, easier to breathe. This is especially important for in-dome exercise or training applications. The Ameri-Dome heater utilizes the heated pool water to heat the dome, thereby requiring no additional heat source. The warm pool water is circulated throught a specially engineered heat exchange coil assembly. Air entering the dome is drawn over the coils to warm it.



### Entry Zippers & Airlocks

Standard commercial domes come with a built in "L" zipper, however, other entry options are available to meet required local codes if needed. We have developed an airlock system that is ADA compliant (handicap accessible) making dome entry and exit easier and possible for those with disabilities. Airlocks are equipped with keylock security doors.

Note: Rotary doors are no longer legal in many jurisdictions.





3



## Engineering

In most localities it is required that commercial domes are structurally engineered to withstand winds of 80 MPH. Each commercial Ameri-Dome is engineered to regulatory standards with regards to wind and structural stress. A copy of the engineering report is available for local authorities.

Note: Please check with local authorities about engineering or local permits that may be required.

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### Dome Construction

All Ameri-Domes are custom made. As each one is made to order, our customers always receive a product which was made exactly to their specifications. After orders are received, they are placed on the production schedule in sequence. Each unit is manufactured to exacting tolerances using state of the art equipment. The actual manufacturing area is kept remarkably clean to isolate any contaminants from the manufacturing process. Using the plans provided by engineering, the individual sections of the enclosure are then hand dimensioned to form each panel. While this is occurring, the cable anchor hem assembly is manufactured in another area of the plant. The panels are "welded" or "heat sealed" together to form the walls, ceiling, and corners of the unit. This "welding" process is completed with the use of "radio frequency" (RF) sealing machines and is more commonly referred to as "vulcanizing". Using this process eliminates the need of using liquid adhesives which tend to be unsightly and unreliable.

## Blower System

Ameri-Domes are fully supported by a reliable blower system. The air enters the dome near the hem and cable. The blower(s) can be located anywhere around the perimeter of the dome except at a corner or directly in front of a door. The blower system can be easily coupled to Ameri-Dome heaters. The quantity of blowers required is determined by the square footage of the dome. Typically one blower is required for each 2,000 square feet of dome. We may suggest additional blowers in certain circumstances.



# Anchoring

Ameri-Domes are designed to be installed on concrete decks. They are anchored by a series of removable eyebolts and a continuos loop of 3/16" diameter vinyl coated steel cable rated at 3000 pounds. This cable is

sealed into the hem at the base of the enclosure. Anchor sleeves are placed into the pool deck at regular intervals. These anchor sleeves are 1/2" in diameter and 1-7/8" long. In the center of each sleeve is a 3/8" threaded hole into which the eyebolts are inserted. The cable in the hem is inserted through the eyebolt loops thereby securing the dome to the deck. The air seal from the base of the dome to the deck is created by an "air flap" that lays on the pool deck.

When the swimming pool dome is removed during warmer weather, the eyebolts are removed to clear the deck. The sleeves remain in the concrete and are flush with the surface of the deck, leaving no obstacles or trip hazards. Hole plugs are provided to keep debris out of the holes when eyebolts are removed.







### Ease of Installation and Removal

Ease of installation and removal of the Ameri-Dome is a true advantage over other commercial dome options. The Ameri-Dome typically takes less people to install and remove than other dome systems. Our simple layout and design process enables most organizations to utilize either typical maintenance crews or a group of volunteers to complete a quality installation in a timely manner.

For example, an 80' x 100' dome (8000 sq. ft.) can usually be installed by a group of inexperienced volunteers or workmen as follows: 2 people for 8 hours and an additional 6 people for 3 hours nearing the completion of installation. I.E. the additional helpers are needed to help float the dome across the pool. Total man hours expended are approximately 34 hours. (This is for initial install only, subsequent installs require approximately half that time.)

An installation CD is included with each dome.

### Installation Overview

#### Step 1: Chalk Line

Use a chalk line to snap the perimeter dimensions of the dome on the concrete pool deck.

#### Step 2: Mark Anchor Spacing

Mark anchor spacing with chalk according to provided diagram. Note: larger domes require anchor spacing at approximate 1 foot intervals.

#### **Step 3: Drilling Anchor Holes**

Drill the anchor holes with a rotohammer (or hammer-drill) and a 1/2" diameter masonry bit to a depth of 2" at each anchor location.

#### **Step 4: Installing Anchors**

Place anchor sleeves into each hole drilled. "Set" anchors with provided anchor setting tool.

#### Step 5: Spreading out the Dome

Spread the dome over the pool and position as closely as possible to the perimeter chalk line.

#### Step 6: Add the Eyebolts

Screw an eyebolt into each anchor.

#### Step 7: Attach Eyebolts to Cable

Expose the cable in the anchor hem and attach the cable of the dome to the eyebolts.

#### Step 8: Airlock Entries

Assemble airlock entries and secure to pool deck at appropriate locations. Attach airlocks to shrouds on dome.

#### **Step 9: Position Dome Blower**

Position the blower assemblies (and dome heaters, if ordered) at the perimeter of the dome.

#### Step 10: Wrap Up

Double check to make sure everything is in order and plug the dome in to begin inflation.



Lifetime & Warranty

### 🔪 Dome Lifespan

There are four conditions which affect the lifespan of your dome.

- 1. Climate in which the pool dome is installed.
- 2. Cleaning and subsequent storage of the dome.
- 3. Whether or not the dome is left up in hotter weather.
- 4. Color of the dome.

1. Generally speaking, the hotter the climate the shorter the life of the unit. In warmer areas such as Phoenix Arizona, we expect about 7 to 9 years of service from an Ameri-Dome. In colder regions, a life span of 9 to 12 years in not uncommon. Recently our facility manufactured a new unit to replace a 12 year old one in the Northeast. (Interestingly enough, the original blowers were still working fine!)

2. Proper cleaning and storage of the unit will prolong the life of the product and make the following seasons installation much more pleasant. It is not a difficult procedure and the long term benefits are worth while.

3. If a swimming pool enclosure is left up in very hot weather for extended periods of time, there may be a problem. In this situation, the unit can heat up excessively from the combination of the sun and the accumulation of the retained heat within itself. This heat can cause the pool dome to stretch out of shape and it will not return to it's original design.

4. Darker colors typically will not last as long as lighter colors.

### Warranty and Repairs

#### 3 Year Limited Warranty

Ameri-Brand Products, Inc. guarantees the Commercial Ameri-Dome against seam separation and faulty workmanship under normal use and service for a three year period from the schedule and date shown below. Under the same terms, the dome's fabric shall be covered against rot, excessive loss of strength, and deterioration. The manufacturer's obligation shall be specifically limited to repairing or replacing the dome at the manufacturers option, and does not include installation or other expenses. The warranty does not apply to damages caused by accidents, windstorms, punctures, improper installation, vandalism, or negligence. The dome must be deflated in expectation of winds in excess of thirty mph. The dome must be stored between seasons thoroughly dry and folded and kept in a protected area. Zippered entries are not covered by the warranty. Blowers are covered by a one year manufacturers warranty.

#### Schedule of Warranty Coverage

From 0-24 months free repair or replacement

From 25-36 months an allowance equal to 1/12 the retail price of the dome for each month remaining in the warranty period

To initiate a warranty claim, you must within ten days inform us in writing of the defect. Photos are helpful. You will be given a response within ten days as to the disposition of your claim. If it is determined that the dome is defective you will be given a return authorization number which must be shown during the shipment. Freight charges must be prepaid, collect shipments will not be accepted.

A repair kit is included with each Commercial Ameri-Dome should it require an "in field" repair on small tears or punctures.





# Wind?

Our pool dome enclosures are designed to withstand a decent wind-storm. It is not uncommon for our customers to report that their Ameri-Dome has withstood wind gusts in excess of 60 mph. We have heard of even greater wind resistance from our product, but we don't recommend you push the limit if at all possible. Please see engineering on page 3.

# Snow?

A very common question is how an Ameri-Dome behaves in heavy snow conditions. During a light to medium snowfall, the snow typically melts off the top of the dome due to the heat escaping from the pool water and being trapped within the enclosure, against the ceiling. When a heavy snow storm is expected, simply turn off the blower(s) and the pool dome can serve as a normal pool cover. Should the dome be left up and unattended, the excessive snow from a very severe snowstorm could begin to accumulate on the top. In such an instance, the weight of the snow would bring the dome very slowly (over a period of hours) to the surface of the water. Upon touching the water, the snow then would melt and the dome would re-inflate itself. This does not damage the dome. A large percentage of our units are sold in the Upper Midwestern states and they do extremely well under such cold and unpredictable conditions. The vinyl is stable from 160 degrees to -22 degrees Fahrenheit.

## Inflation Time?

Inflation time depends on the size of the dome you purchase and the number of blowers. Typical inflation times for a dome 3,000 - 5,000 square feet is approximately 30 - 40 minutes. A dome sized 5,000 - 8,000 square feet will fully inflate in approximately 50 - 60 minutes.

## Cost of Operation?

Cost of operation depends also on the size of the dome and the number of blowers the dome requires to stay fully inflated. Each 2,000 square feet of dome requires one blower. Each blower costs approximately 35 - 40 dollars to run per month. These blowers run continuously. Domes placed over pools that previously were operated uncovered during winter months can expect <u>a reduction in pool heating expenses of 40% - 50%</u>. Additionally, the amount of chemicals necessary to maintain a pool covered by a dome are typically less than half of the amount needed for pools which are not covered by a dome.

### Removal and Storage?

Prior to removal the dome must be cleaned. Cleaning of a 6,000 square foot dome is easily done by in-house maintenance crews or volunteers. This size dome takes 4 people approximately 4 - 5 hours to clean completely. Removal and folding of this size dome takes 8 people approximately 2 hours. The dome should be stored in a room with a temperature between 10° and 140° Fahrenheit. Many customers will build a cart or platform with multiple casters for ease of movement and storage. A set of plans for cart construction is available.

# Acquisition Expense?

Current quotes can be easily obtained by calling us at 800-982-6966 and asking for the Commercial Dome Department. We have a limited capacity to manufacture domes so it is best to order early in the year. If you are confident that you will be purchasing a dome a production slot can be assured by placing a deposit. Orders placed by the beginning of the summer generally guarantee a fall delivery (depending on workload). Ordering terms are as follows: 50% is required for a deposit. Balance due prior to delivery.







White Ameri-Dome with airlock for YMCA



Inside the YMCA Ameri-Dome



White Ameri-Dome and airlock system







Ameri-Dome Airlock System



Dual Ameri-Dome Blower Heating System



YMCA commercial Ameri-Dome from soccer field







Chinhae Navy Base South Korea



All white commercial Ameri-Dome with rotary door

