Air Dome Fact Sheet

What are the dimensions?

The dome is 22'8" tall at its highest point. It is 93' long and 71' wide. It holds 102,292 cubic feet of air!

What is it made of?

The dome is made of two layers of PVC with a polyester fabric base sandwiched between. It is 22ml thick and 18oz per square yard in weight. It is film-coated to protect it from UV radiation and it is treated with fungicides to prevent mold and mildew.

How does it stay inflated?

There are 8 blower units that blow warm air into the dome to maintain its form. Depending on temperature outside and amount of air let out from the doors and windows, from 4-8 of the blowers run at once, and are turned on or off as needed.

How is it anchored to the deck?

The dome is bolted to the deck with over 350 anchors that are embedded 2" into the concrete.

What are air and water temperatures?

The air in the dome is roughly 70 degrees, depending on the weather and amount of door-opening. The water in the instructional pool is maintained at 87 degrees.

Why is it so humid inside?

The air in the dome refreshes and circulates, but it can be humid and sometimes even foggy. Humidity is the amount of water vapor in the air, and warm air can hold more water than cold air. Pair our warm air with a large water source that's continually evaporating, and you get humidity. If the amount of water vapor in the air reaches 100% relative humidity (can't hold any more), fog appears and water condenses on cool surfaces such as on the inside of the dome fabric. All this warm air keeps the dome toasty, so enjoy the humidity—it's completely healthy!

Why are there double doors?

The double-door entrances are called "air-lock doors," and they help maintain the inflation of the dome. Air under pressure naturally wants to travel to places with less pressure (namely, outside!) so when you open a door, the air wants to rush out. The air-lock spaces help keep that air inside which maintains inflation pressure. So please help keep the doors securely closed!

When is it taken down and put up?

The dome is designed to stay in place all winter and we plan to keep it up for the five months between Halloween and the first week of April. This covers our Winter and Spring 1 sessions.

How long does it take to put up and take down?

We will set aside one day for installation and one for dismantle. With a big crew it takes just a few hours, but we wish to take the time to put it up securely and take it down in a safe, tidy manner.

Safety Information

What are the poles and cables for?

The large poles and the criss-crossing cables inside the dome make up one of our safety systems. They keep the dome material 7 feet off the surface of the water in a deflated state.

What if there's a power outage?

The electric blowers are backed up by a natural gas-powered generator. With any power glitch, the generator automatically takes over for both the blowers and the lights.

Who inspected it?

After installation, the dome and all safety systems were inspected and approved by the City of Menlo Park Fire Marshall, the San Mateo County Health Department, and the City of Menlo Park Building Department.

What about emergency exits?

The dome has two emergency exits in addition to the three air-lock doors. These are to be used only in emergencies as opening the doors allows air to escape which affects inflation of the dome.

How many people can fit in the dome?

The fire department has determined that maximum safe capacity at any one time is 50 people.

Why can't I bring a chair with me inside?

The fire department stipulates that no seating will be allowed within the dome. Please feel free to help your child in or out of the water, but exit the dome if you don't plan to swim yourself.