



## Site Visit Checklist

Pool top surface area (length times width) :  
Draw it with dimensions if its not obvious

How often will a pool cover be used?

Is the pool surface directly exposed to wind?

Estimate the shade on the pool surface over the middle 6 hours of the day...

Address of site so we can look at it on aerial maps..

Elevation difference (height) from pool surface to the inlet to the collectors (the bottom of the proposed collector bank)...

Plumbing pipe size coming out of filter?

Other plumbing pipe sizes downstream?

Is there a gas heater or other heater?

Record any pressure readings and where they are. On residential pools the filter pressure is between the filter and the pump. We want to know what it is right after the filter. We want the clean filter pressure so look at the pool service logs or ask the customer how long it has been since the filter was cleaned.

Ideal but not absolutely required is to drill and tap a 0-15 psi pressure gage in the pipe coming out of the filter.

What type of filter is it? DE, Sand or cartridge. Modular media is a new type.

Pump Hp? Is it 2 speed or variable speed?

Is there a spa built into the pool?

If there is a spa does it have a separate pump for spa jets? That'll be a high HP pump with a pipe in and a pipe out both disappearing underground. A waterfall pump would also fit this description.

What does the filter pressure change to when you switch to spa mode?

What other water features are present? Look for anything else plumbed in downstream of the filter like a pool sweep (vacuum that uses pressure and collects dirt in a bag).

Waterfall or other special cleaning system? Draw a schematic of how the plumbing is arranged if it is anything more than a pool spa combo with a gas heater. Photograph it if possible.

Separate pipe to the pool or the spa if it is a pool spa combo? If you haven't built it yet then add this feature. All pools should have a dedicated return from solar. That way we can be sure that we can take the pressure out of the solar equation ( see [www.h2otsun.com/pools](http://www.h2otsun.com/pools)) ...but they don't so don't expect to find it and don't hassle the pool builder.

What temperature and season is desired?

Pick the best roof spaces or ground areas if no roof space is available. Remember we're usually looking for a space close to the same top surface area as the pool. Half as big at least. There's no way around the need for a space to put panels. It doesn't matter how far away it is. All that matters is that you can get pipes to and from.

What is the roof type? Shingles? Tile? Photograph it

If the space is rectangular what is the peak to gutter dimension?  
What is the side to side dimension?

What is the shape of the space if not rectangular?

If it is a tile roof count the rows of tiles and provide the side to side dimensions.

Draw a sketch of the roof space with dimensions if it is not straightforward.  
Alternatively measure for Powerstrip knowing that each one foot wide section uses up 13.5 inches. The length which is usually peak to gutter should be one to two feet less than the peak to gutter dimension.

Can the collectors go sideways? Not if the roof is steep or there is a large snow load in winter. Not on wood shake.

If a rack mount or direct ground mount is required or desired how much slope are we dealing with and what space up and down the slope and side to side do we have available?

Note south facing is always best. East or west is roughly a 25% penalty. Do not even consider any roof space facing north of the east/west line. In the sun and facing the sun are not the same thing and the time of year you need the heat most is when the sun is down at 45 degrees in the southern sky. This is basic solar geometry. Its not different on your roof unless you are on another planet. Substitute south for north if you are in the southern hemisphere. It is true that any collector in the sun will take the heat from that space and deliver it to the pool. There is some energy to be gained but not enough to justify the investment. On residential pool the pool must be warm without the gas heater and on commercial pools the system must pay for itself in 3 years not 13 years. In either case solar facing the wrong way is a mistake. The way to check roof orientation is with a map including an aerial map like google earth. Maps orient the page with true north at the top. Magnetic north is different than true north. True south is where the sun is in the middle of the solar day.

Go back to <http://www.h2otsun.com/form03ht.html> and fill in the form. Not all questions here are asked there so keep these answers for the phone discussion.