

STAY
COOLER
4 Less Money

BUFF BROWN

Foremost Expert on Evaporative Coolers

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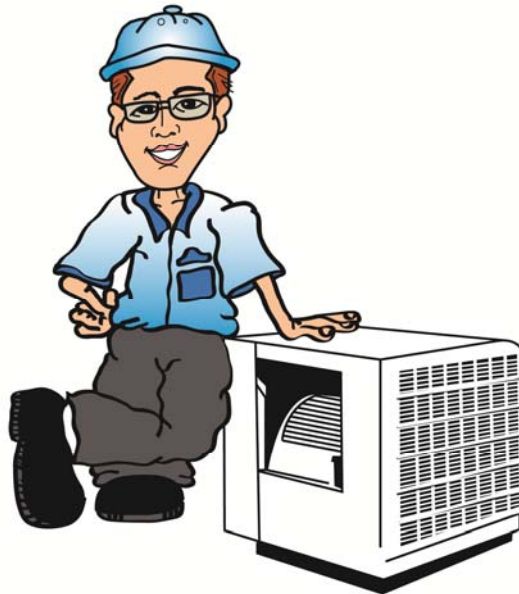
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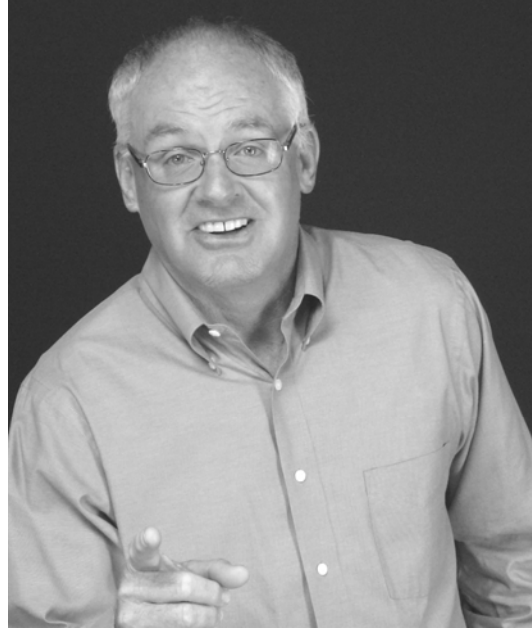
Thank you to my amazing team members past and present that helped Desert Cooler Specialist become the utmost expert in evaporative cooling. Thank you Scott McNeil, Curtis Carver, and Joe Dominguez for your passion for helping our customers stay comfortable without going broke.

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Who Is Buff?

I'm Buff Brown. I live in Palm Springs, California, and have done so for close to 50 years. I moved here in 1962 from Salt Lake City, Utah. I was introduced to using swamp coolers as a means of cooling our home in the



early 60's. As a young man in high school wanting to work, I was taken on by my best friend's father, Mickey Albright, who had a small swamp cooler company which bore his name; Mickey Albright's Desert Coolers – this is back in the early '70's.

Mickey serviced and installed swamp coolers. We drove around in a blue 1956 Ford pickup truck that had wooden boxes mounted on both sides, a ladder sticking out the back, and no air-conditioning. It was very primitive but we got the job done.

I worked for Mickey during the summer months as a part-time job to get some extra cash. Not knowing at the time he was teaching me values and a trade that would serve me throughout my life. Mickey was strict and always told me, “Look, if you’re going to do a job, do it right the first time or don’t do it at all.” That philosophy has stuck with me to this day, not only in my business, but in my personal life as well.

I worked for Mickey for a couple of summers and after completing two years of college, I decided to move to Newport Beach, California to work in a restaurant called Bobby McGee’s. Everything was going great in Newport Beach. I had a great job, was making great money and was having a blast. However, one day I got a phone call from my best friend Mike, Mickey’s son who said, “My father just passed away. I need you to come back and help me run his company; I’m going to take it to another level.” I said, “Great, let’s grow this company.”

I came back to Palm Springs and we started growing the company. As we grew the business Mike realized that it was time to get his contractor’s license to add air

conditioning and heating into the business. When Mickey had his company, he wasn't a licensed contractor and the air-conditioning companies loved him for it; they hated working on swamp coolers and would refer all of their business to him. The Contractor's Board was always pressuring Mickey to get his contractor's license. However, the air-conditioning companies convinced the Contractor's Board he didn't need a license by saying, "Hey look guys, leave him alone, he's just working on swamp coolers. We hate working on swamp coolers and he's doing us a huge favor, so just leave him alone." And they did.

As the company grew we realized we needed to know how to bend and fabricate sheet metal. Mike bought some sheet metal equipment and we both taught ourselves how to layout and "break" (bend) sheet metal. Learning how to manipulate sheet-metal was quite comical because every time we went into the shop we came out covered in Band-Aids due to the fact we had cut ourselves so much. We learned very quickly that sheet metal was very sharp and needed to be respected, kind of like women.

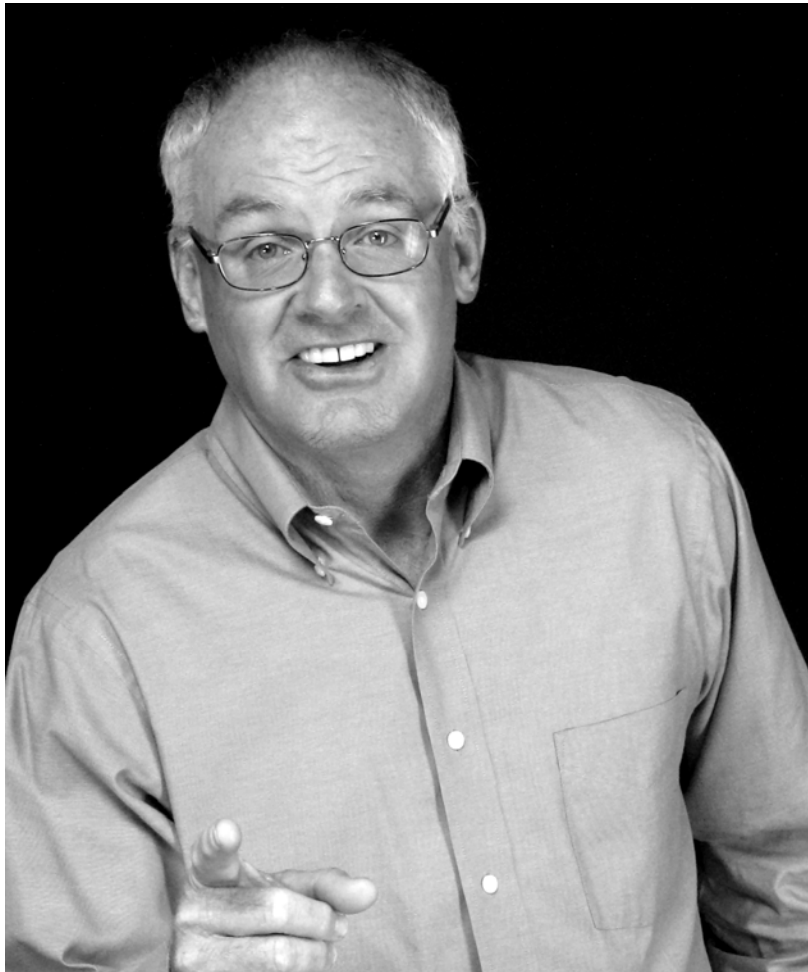
It was time to grow so Mike hired a guy that was very knowledgeable about air-conditioning and heating. We started taking on new construction work and the company was growing well. I did what I knew best and that was in the sales, service, and installation of evaporative coolers. I ran the sheet-metal and fabrication aspects of the company and even started designing ductwork for the new construction division of the company. They kept me so busy I never got involved with the service and repair of air-conditioning and heating, all I knew was evaporative cooling and sheet-metal. A couple of years down the road, Mike decided it was time to move on to something else. He offered the company to me and I said “You know I don’t really have the money to buy your company so I’ll just work for whoever buys it.” He eventually sold it to some people that were working for Mike at the time. I thought to myself, “Why am I going to go to work for them, when I know more than they do about running a company. You know what, I’m going to step away and start my own evaporative cooling company.” We named the company Desert Cooler Specialist.

I started Desert Cooler Specialist in 1986 with just one truck operating out of my garage, and with no customers. I went around and left flyers at homes and advertised in a little weekly mobile home newspaper. At the time there were probably 15 or 20 mobile home parks and that little weekly newspaper is where I got my first customers. We got quite a bit of business in 1986, our first year. I think we did a little over \$23,000 in revenue (\$49,557 in 2014 dollars). Things were a little hectic in the beginning. My family was growing, we now had two boys and my wife was working in the super market. I would work in the evaporative cooling business during the day and was a waiter at night in a local restaurant to help support my family. I've always had this entrepreneurial spirit of being in control of my own destiny. As a waiter I was in control of how much money I could make each night. I learned early on that if I could give my customers a dining experience instead of just throwing food at them, I could make great money. It was all about customer service and exceeding their expectation. I've always had a passion for helping others get what they want. When I was very young – eight or nine years old – I would tie our lawnmower behind my bicycle and go around the neighborhood

mowing lawns to make some extra money. In my twenty's, Mike and I were involved in several small oddball entrepreneurial businesses such as diving for golf balls and boat bottom cleaning.

Some of the clients I have today will occasionally come up to me and say, "You know, I remember when you used to come to my house with Mickey Albright to service my cooler. He treated you so bad and I felt so sorry for you." I would say to them, "Please don't. That man taught me so much. Not only did he teach me about evaporative cooling but also about taking care of the client and doing the right thing." That's our whole motto, take care of the client first and then take care of the equipment. Almost 30 years later my passion has not changed, and that's why our business card reads: "Your Comfort...Our Passion".

I hope you find this book informative and it helps you understand how evaporative cooling can improve your life style, your health and reduce your utilities during the hot summer months.



**Buff Brown is available for speaking engagements,
Radio and TV interviews, education & consulting at:**

<http://www.desertcoolerspecialist.com>

(760) 832-8737

info@desertcoolerspecialist.com

Why I Chose Evaporative Cooling as a Career?

I think evaporative cooling chose me in a way. While I worked for Mike and his company I was running everything on the evaporative cooling and sheet metal sides of the business. I didn't have the time to learn anything else. Nobody said, "Come on let me teach you about air conditioning." I just focused on evaporative cooling and sheet metal.

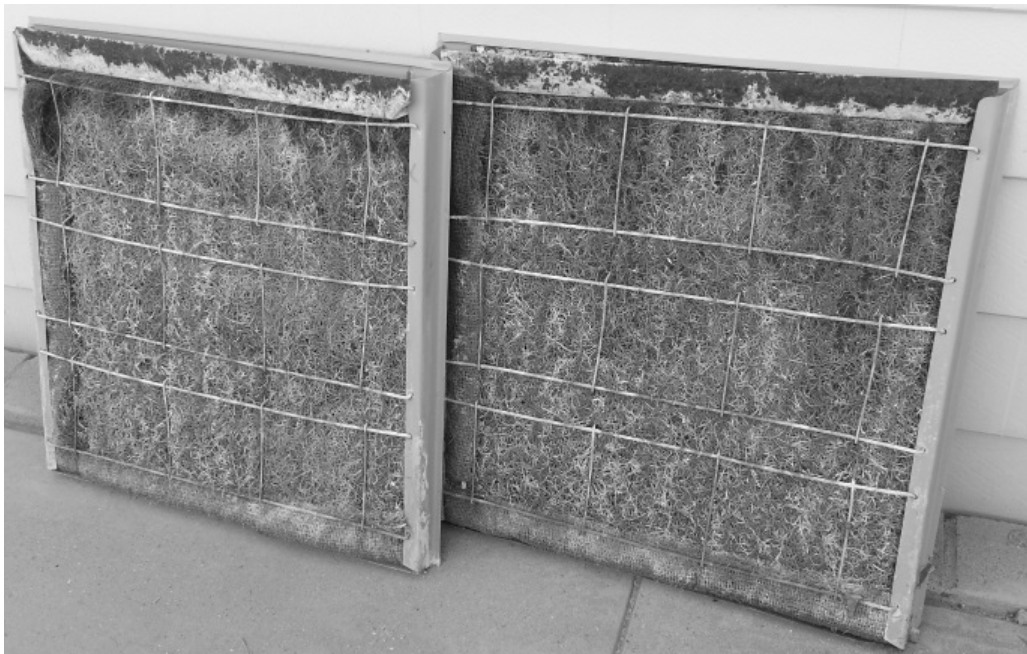
Back in the '60's and '70's, evaporative cooling became very, very popular because of how cheap it was to operate and the comfort it provided. Evaporative cooling was very inexpensive to install and service back then. If you had air-conditioning in your house, you were in the upper income echelon; up at the country club level. Most of the mobile homes and the lower/middle income people used evaporative cooling during the summer as the only way to stay cool. Back in the early '60's and '70's during the summer – June, July and August – Palm Springs pretty much became a ghost town because of how hot it would get. Virtually everybody would leave the desert and go somewhere

cooler. My family would go to San Diego for three months to avoid the heat. Not a lot of people hung out in Palm Springs during the summer, but those that did had swamp coolers.

I think what I like most about swamp coolers and evaporative cooling is they have few moving parts and you don't need to be a rocket scientist to work on them. Coolers cost a lot less to service and install compared to central air-conditioning. Additionally, air-conditioning companies in the valley really did not like to work on, install, service or sell evaporative coolers. I remember thinking to myself, "There's a niche here and people need somebody to take care of that professionally".

Because most air-conditioning companies did not want to work on swamp coolers, they often did terrible, shoddy work where they overcharged the customer and rarely fixed the issue. I would get so frustrated when a client would call me up after some other company had worked on their evaporative cooler and it still was not cooling. Frequently, I would arrive at the equipment and just stand there shaking my head.

True Story: I once went to one job where the client had called an air-conditioning company and the technician didn't have any cooler filter media, but he did have air-conditioning filter media on his truck. Guess what I found? Instead of using factory recommended Aspen Pad filter media, he cut air conditioning filter media called "hog hair" from a roll and put it in the filter racks and charged the customer. "Hog hair" filter media has no cooling capacity; it's a filter designed to catch debris from getting into your air-conditioning system, there is no way it will cool. I couldn't believe that a company would allow their technician to do something like that and take advantage of a homeowner.



Hog-Hair filters in cooler

WHY I CHOSE EVAPORATIVE COOLING AS A CAREER?

I've always had a passion for helping people and doing what's right for them. I was seeing a lot of customers being taken advantage of in the servicing and installation of their evaporative cooling systems. Like anything else, if you don't like doing it, you won't do it well and if you don't do the job correctly, it's not going to work to the manufacturer's specifications. I think evaporative cooling more or less picked me. We both came to an agreement: "Look, I'll take care of you, you take care of me", and so far it's been a great relationship.

Notes:

~ Chapter #1 ~

History of Evaporative/Swamp Coolers

Evaporative cooling has been around for thousands of years despite people thinking it's only been around for 30 or 40 years. Evaporative cooling actually goes back to ancient times when the Egyptians would hang tapestry in front of palace windows and doors and would run water down the tapestries. When the afternoon breeze blew through these tapestries, it would cause a cooling effect. It could have decreased the inside temperature by as much as 10 to 15 degrees. Those Egyptians were pretty cool guys.

As the Egyptians started using this form of cooling it became very popular and spread quickly throughout the whole region. Now not only Pharaohs and Kings were enjoying this luxury, but villages were adopting this form of cooling and would drape cloths over doors and windows to stay cool.

I have heard stories of back in the very early years of Palm Springs that the old-timers would run water down burlap sacks to cool their shacks by utilizing the afternoon breeze. Keep in mind, back in those days Palm Springs was a desert oasis and there were no golf courses. It was not uncommon for the desert heat to reach 115, 120, 125 degrees. Any relief from the heat by any means possible was always welcomed.

The old timers got very innovative and started coming up with other ways of running water down a cooling media. They would put a fan in front of a moistened burlap sack to blow the air through it instead of waiting for that afternoon breeze. As long as they had electricity they could now cool down their homes at all times. Along came a company called Arctic Circle who started manufacturing what I believe was the very first basic swamp cooler.

Basic swamp coolers consist of a metal cabinet with a blower in it that's driven by a motor connected to a belt. The pan on the bottom was the water reservoir and it had some kind of pumping system that would pump

water over the pads. The outside filter racks would have some type of filter media in it.

They found that Aspen wood was a great cooling media; it saturated well and held the moisture in, thus giving a larger cooling temperature range. By installing these systems on roofs or on the side of the house, they could cool the entire home and get up to 20 degrees temperature reduction during the summer!

In early 1970, a company called Arvin came to Mickey's company in a motor home that had been gutted and transformed into a showroom on wheels. They came to us in Palm Springs because we were the only swamp cooling company in the Coachella Valley and said, "Look we have this new evaporative cooler and we want to give you one to put on your shop to test out how it works."

We looked at this thing like it was something from outer space. It looked nothing like a swamp cooler as we knew them. It only had one opening and we quickly said, "This is not going to work. You're not going to get enough air flow through this one opening. You need

more openings and more filter area.” The filter media was made out of a cardboard-type substance. Now instead of it being one inch thick it was eight inches thick. We just thought there is no way this is going to work. One inlet, one pad, eight inches instead of one; how could this thing cool anything? You’re going to need a bigger motor to pull the air through that thick pad.

They eventually convinced us this was the evaporative cooler of the future and we thought, all right, we’ll go ahead and put one of these new evaporative cooling systems on our shop and see what happens.

That’s when the transformation took place from the basic swamp cooler to what’s now called the single-inlet system or evaporative cooler. It was revolutionary. Not only cooling much quicker and much faster with an even bigger temperature drop, but the air was also much drier. It didn’t have that “swampy” feeling, especially on those mildly humid days. We were the first company in the Palm Springs area to start offering what was then called Mastercool Evaporative Cooler.

Once the Mastercool cooler caught on, it spread like wildfire. The single-inlet cooler is now today, the most efficient evaporative cooling system on the market. At the time, Mastercool was the leader in the industry of evaporative cooling. They came out with what was called a second stage unit that added a pre-cooler to the main system dropping the temperature even more.

You were able to get almost 30, 35, and sometimes 40 degree temperature difference between outside temperature and inside discharge through anywhere from 16 to 24 inches of filter media. All of a sudden, the evaporative cooling business became very popular. It was still a lot cheaper than central air conditioning to install and they were a lot cheaper to operate than air conditioning.

Mastercool went out of business in 2006 because of their poor customer service and the relocation of their manufacturing to Mexico. There was another company in Phoenix, Arizona called Phoenix Manufacturing, who was right on the heels of Mastercool in their design and concept.

When Mastercool went out of business, Phoenix Manufacturing picked up the market share and ran with it. They are now the leader in evaporative cooling manufacturing. They upgraded the system from the standard 8-inch model to their high-performance 12-inch model and their Aerocool Pro-Series, with a 4x4 filter media. It is an interesting concept in itself; with two 4-inch thick filters.

The outside filter media is a much denser filter media than your standard filter media which is backed up with a standard 4-inch filter media. It does the same thing as the 12-inch filter media, slowing down the air going through that filter media. The thicker the pad, the longer air travels through the filter media, the colder and drier the air becomes.

Today, they make commercial-size units that can cool warehouses. We recently installed six commercial-sized units that have two dual-inlets for Mercedes-Benz of Palm Springs. This means they have two 12-inch filter media on each side, and the heart that drives the blower is a 7.5 horsepower motor. During the hot summer days you can go into the automotive bay where

the mechanics work and it will be anywhere from 75 to 85 degrees. And that's during the hot days in August.

Evaporative cooling has come a long way. It's much cheaper for a commercial application to run evaporative cooling than it would be to run air conditioning. Mercedes-Benz would have needed probably 50 tons of air to cool their operation and we were able to do it with 6 units which cost them a lot less to operate.

Evaporative cooling is evolving as we speak. Phoenix Manufacturing is still coming out with new products all the time. Today, they are thermostatically controlled with dual-speed operation. The thermostats can change the speed from high to low, and low to high, depending on what you set the thermostat at.

Evaporative cooling, like air conditioning, is changing very rapidly. But, it's still very basic. Evaporative coolers are very economical to operate and a third of the cost of central air conditioning to install. Evaporative cooling is here to stay. It's been around for thousands of years and I don't see it going away any time soon.

~ Chapter #2 ~

What Should I Look for in an Evaporative Cooler?

A lot of people will call, and say, “I’m interested in getting an evaporative cooler.” I’ll respond, “Great. What’s the square footage of your house?” They’ll tell me the square footage of their house, but in their mind, they’ve already made a decision. They’ve already been to the Big Box Stores and seen this big, huge, giant evaporative cooler on the floor for \$600. That’s the one they want and that’s what they think it’s going to cost to put an evaporative cooler in their home.

This is what I tell them, “Great. What I need to do is come do a home evaluation to see exactly what the home needs and if there is a place we can install the evaporative cooler?” Not every home, believe it or not, is capable of accepting an evaporative cooling system. Because every home is different, so is every installation.

Every year, when I go out, I'll probably run into 5 to 10 homes that cannot have an evaporative cooling system. What we are looking for is, "can we do it in a ducted system? Can we do a wall-mounted system? Are they in an association, do they have a tiled roof or is there room on the side yard?" Sometimes there's just no place to put an evaporative cooling system.

First, I need to find out what your needs are. Any contractor or Big Box Store that quotes you a price without seeing you and your home is doing you a disservice. The other key elements are the Four Factors that will determine whether you want an evaporative cooler or not.

Here are the Four Factors. Two of them you have a choice on and two of them you don't.

- The Technical Requirement - You don't have a choice here. Sorry! The size of the home, the construction type, floor plan and lay out of the home will determine what size of system you need.

- Code Requirement – You don't have a choice here either. Safety and building codes, city permits. When we talk about Code requirement we are talking about the safety of your home and family.
- Environmental Choices – Your Choice. Energy efficiency – Aspen vs rigid media. Comfort enhancing options. Convenience in operation and maintenance.
- People's Choices – Your Choice of installer. Consider Commitment to Excellence, Expertise in their field, online reviews, who you trust and like.

These are the Four Factors. Two choices you don't have and two choices you do. It's just the way it is. The home determines what size of evaporative cooler is needed to keep you comfortable. Anybody can install a big evaporative cooler in the house and blow small children out the door. That's not comfort.

We design systems so that 75 percent of the time, you're running your evaporative cooler on low speed to keep the house anywhere between 76° and 82°. That's what comfort is all about.

That's why we come out and determine exactly what the square footage is, where the system can go and what type of system you want within your budget. This is why we offer you options to make sure you have the right system for your needs.

Do you want a basic swamp cooler? Or are you looking for a whole house ducted system that's ducted into all the bedrooms and the living space so the whole house is being cooled evenly? Do you want automatic relief systems to vent your unit? Are you looking for a thermostat? Or would a timer work better for you? Are you looking to cool your garage; to keep your car and garage from getting 120 degrees during the summer months? There is a lot to consider when installing an evaporative cooler. We just don't come in and say, "We're going to put an evaporative cooler in your wall and you're good to go."

We look at the whole house. That is why we ask a lot of questions when we come to your home. What kind of system are you looking for? Most of the time, people have done some research. They've gone to the Big Box Stores and looked at the units on the floor or gone to

our website. Checked out other websites and done a little research. They may have even gone to a friend's house that has an evaporative cooler. Asking a lot of questions gives us insight as to what your needs are and what you can afford.

True story: We had a customer that wanted an evaporative cooler installed in his house. During the investigation with the homeowner, we asked him, "So you're here year round, right?" He says "Well no, we want this evaporative cooler so when we are gone for three months during the summer; we can have this cooler on to keep the house cool so, we don't have to run the air conditioner."

I said, "Great idea. You know, I can keep the house, even in August, at 82° to 88°. Instead of setting your air conditioner at 90° and having it cost you big dollars we can do it for pennies." I also said, "Great. Let's put it on a timer." The reason I suggested the timer is because we don't want the cooler running 24-7 and we want a drying out period. We don't need to run the cooler at night. The desert cools down. He said, "No, no, no. I want the cooler on a thermostat." I said, "Okay."

We can do that but, here's what we have found: there are certain times of the season, such as when it's hot and humid, the thermostat may not get satisfied and therefore run 24-7." He said, "That's what I want. I want that so that if it needs to run 24-7, it runs 24-7." I said, "Okay, but I don't recommend it." Ultimately the final decision is up to the client and what they want. Besides, isn't the customer always right?

We went ahead and put the unit in, in the early part of summer. I got a call in September when they got back, he said, "You need to come over here because we have a real problem." I said, "All right I'll be right there." When I walk in the house I could smell the mold. Their kitchen and living room was full of mold because their evaporative cooler had been running all summer, 24-7, especially during August and parts of September.

The cooler ran 24/7 without having a drying out period, which is what I recommended by using a timer. They had a real problem. It's very important that we find out exactly what your needs are and design the system around those needs.

Factor number one is the house is going to tell us exactly what you need and we go from there. Factor number two is a very important factor. As a licensed contractor, we follow all the city and state codes. There are certain things that need to be done to code, not only to protect us as contractors, but to protect your home and your family.

We make sure that the wiring and the water hookup is all done to code. The two basic things are, it uses electricity and it uses water. You want to make sure that it's on a separate circuit. You also want to make sure you're hooking it up to a water source that the homeowner can get to; if something should go wrong the water can be turned off.

It needs to be done with refrigerant copper for the water supply line, not with cheap copper that you would buy at Home Depot or a big box store. Code compliance and finding out exactly what the home is going to require are two important factors.

The third factor is the type of company that you're going to have installing your evaporative cooling

system. You know the best source of finding out which company to use is by looking at referrals.

Today, with the Internet being as powerful as it is, going on and checking reviews; it is a great way to find out who is good at what they do and who is not so good. If I was having a heart attack, I wouldn't go to my GP for heart surgery. If I was going to put an evaporative cooler in, I wouldn't personally go to an air-conditioning company. Air-conditioning companies are great and we need them, but they are specialists in heating and air-conditioning.

Evaporative cooling is designed completely different, sized different, and ducted different than central air-conditioning systems. Just make sure the company that you're choosing has good references, good reviews, is knowledgeable on the equipment they are offering for your home, and backs up their work with warranties or guarantees.

The fourth and, I think, the most important factor is, the people that are going to install your system.

You know, a lot of times I get clients that say, “Yes, we want to go ahead and have you install our cooling system.”

“I have one question for you though. And that question is; are the guys that are showing up – do any of them speak English?” I look at them and I kind of shake my head, “You know, fortunately sir, all of them do.” “Oh well that’s a relief.”

As a business owner, I want my employees to be able to communicate with the homeowner exactly what they are going to do when they get there. Introduce themselves and introduce their team. Then put down floor runners and carpet runners to protect your home.

When they are done, they walk the customer through the system showing them how to operate the controls, as well as how to work the windows in conjunction with their evaporative cooler.

You also want to make sure the company is going to send out installers and technicians that have been background checked and drug tested.

There are a lot of strange characters in today's society. Did you know the number one trade taught in the prison system today is plumbing, and air-conditioning is number two? I have another true story for you on that.

When I had an air-conditioning company, a technician comes in for an interview. He had impeccable credentials, EPA certified, and current on all the new refrigerants. However, on the application we have a place that reads, "Have you ever been convicted of a felony?" The applicant wrote on there "will explain". I got down to that part of the application and said, "What can you tell me about this answer you indicated "will explain"?"

Have you ever been charged with a felony?" He said, "Well, yes. I'll tell you about that." Turns out he was at a bar, got in a fight, pulled a knife on a guy and stabbed him. That technician sitting across from me, the guy who pulled out the knife ended up going to prison. I looked him in the eye and said, "As you should have gone to prison."

~ Chapter #3 ~

What Type of Environment is Best for Evaporative Cooling?

Because evaporative cooling works hand-in-hand with Mother Nature there are certain conditions that are great for evaporative coolers and there are conditions evaporative coolers don't work at all. Evaporative coolers work best in a dry and hot climate, like here in the southern California desert, Phoenix, Arizona, Utah, Colorado and New Mexico.

In these areas, evaporative cooling is very, very popular because of the hot, dry climates. An evaporative cooler would be useless in Florida because of the high humidity. They work best when it's hot and dry; "hot" means anywhere from 80° to 115°. Once it starts getting past 115° though, like 118° or 120°, you're pushing the envelope. It is unlikely an evaporative cooler will be able to perform better than keeping your home cooler than 84° to 86°.

Now that range could be comfortable to some people, but it's not comfortable to me. Everybody is different when it comes to evaporative cooling. What I like in evaporative cooling, and what you like in evaporative cooling, could vary anywhere from 5° to 15°.

True story: When we go back in the fall to do our winter close down on evaporative coolers, I like to check with new clients who had a system installed and ask them, "How did it work, did it keep you comfortable, what did it do for your utility bills?" Undoubtedly, these people will tell me, "You know what? We did not turn on our air conditioner once this summer."

Knowing what kind of summer we had, and knowing that there were certain times in August and September that it was pretty doggone humid. I find myself thinking these people are very, very brave and their comfort level must be a lot higher than mine. Or maybe they only ran their air-conditioners a couple of days. It's fun to find out the different comfort levels people have. "What is your comfort zone?"

I get calls from all around the world because of our website and because people want to know about evaporative cooling. The other day I received a call from New York City. I thought, “Oh it’s probably a stockbroker trying to sell stocks from New York City.” I took the call. “Hello. This is Buff.” There was a silence on the other end of the line. He said, “Yes, is this the Desert Cooler Specialist?”

I said, “Yes, this is Buff with Desert Cooler Specialist. How can I make your day?” He said, “Oh great, I’ve been looking at your website and I need some information on evaporative cooling. We’re going to be building a greenhouse and I want to know, will evaporative cooling work in my greenhouse?” I said, “Great, can I ask you a question? What city are you located in?” He said, “We are in Manhattan.” I exclaimed, “Wow! All right, well this is a new one.”

I began asking questions. That’s what I do. I ask a lot of questions. “First of all, what type of greenhouse is this going to be for? What are you going to be growing in it? How big is your greenhouse going to be? What’s the square footage? And what’s the height of the ceilings?

Whereabouts in Manhattan are you putting this greenhouse?" He said, "Well you've asked some very interesting questions."

First of all, we're going to be building this greenhouse on the roof of a high-rise building in downtown Manhattan." That makes sense because there's no place in Manhattan other than the roof of a skyscraper to put a greenhouse. I said, "All right. What is the temperature there in Manhattan during the summer?" He said, "Well up on this roof it can get very hot. It can get to 110°, 115°."

I said, "Really, I didn't think Manhattan got that hot." He said, "Well, normally in downtown Manhattan it will be 98° to 105°, but it will be very humid." I said, "Okay, now we're getting some solid information here. What's the humidity usually in Manhattan during the summer?" "Oh," he said "it could be as high as 50, 60, sometimes 70 percent."

I said, "Okay, well evaporative coolers usually work best in dry climates." He said, "Again, we're building this on a roof and if you're up there for more than an

hour, it's like you're going to have a heat stroke." I started thinking, and said, "You know what? On top of this roof, is the building that you're setting the greenhouse on surrounded by other buildings?" He replied, "Oh yes, you know Manhattan, we have skyscrapers with a lot of glass acting like mirrors." "Okay, now we're getting someplace.

So you've got this greenhouse you're going to build on top of a roof in Manhattan. And it is surrounded by other skyscrapers that have a lot of glass, that are acting like a magnifying glass on the roof. And you're telling me that it can be anywhere from 110° to 115°." I tell him to take temperature and humidity readings on the roof for the next two weeks and get back to me. That will give us a better idea of what type of system you can use.

True Story: I once went into a house that was maybe 1200 square feet. The gentleman came out and told me exactly what he wanted. "I want a 6500 CFM with a 1 horsepower motor into one opening." I said "That sounds great. So let me ask you a question. Do you have any dogs or kids?"

