How to Find a Qualified HVAC

Contractor with Becky Callegan

SPEAKERS
Kendra Seymour, Becky Callegan

BC
Becky Callegan
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If you hear anything, hear this, mold in an HVAC system is not normal. I want to break that cycle, because it is not normal. It is a sign and a symptom of a more significant underlying issue. That issue is going to be related to moisture, but it is some underlying related moisture issue.

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Kendra Seymour
00:32
Welcome to the HVAC plus D mini class series brought to you by Change the Air Foundation. This series is made possible thanks to the generosity of our sponsor, Santa Fe Dehumidifiers. We are deeply grateful for their support, which helps us continue raising awareness and providing free resources so that more families can breathe safe indoor air. A quick reminder, this 12 part mini class series offers a consumer friendly overview of common HVAC plus D topics. It is not a replacement for professional advice. You can watch the full series on our YouTube channel or by visiting ChangeTheAirFoundation.org, and clicking on our resources tab. Welcome to Episode 11 before you hire an HVAC company, this must watch conversation will empower you to ask the right questions, choose the right technician, recognize key industry terms and spot red flags. Whether you need routine maintenance, troubleshooting for an existing problem or a full system replacement, we'll cover what you need to know. Including how to navigate mold and microbial growth in your system. From essential certifications to warranty basics. This is an episode every homeowner and renter should see a bit about our guest, Becky Callegan, a lifelong Louisiana resident. Grew up in the HVAC industry through her father's air conditioning business. In 2010 she and her husband, AJ, launched their own HVAC company in Covington, where Becky became the first point of contact, guiding clients and building trust and helping them feel confident in choosing their company as the HVAC contractor for their home. In 2019 a severe health crisis revealed toxic mold in their home and workplace, sparking Becky's passion for understanding how buildings impact health. She went on to earn a degree in Health and Wellness and Sustainable Real Estate Development from Tulane University. Today, Becky helps run their company specializing in building science and home performance. She also serves as a part time Assistant Program Coordinator at Change the Air Foundation developing educational initiatives to empower healthier homes.

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Kendra Seymour
02:28
Becky, thank you so much for being here today. I have been looking forward so much to your talk today.

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Becky Callegan
02:37
Yes, thank you for having me. I am super excited about this opportunity. I know you and I have gone back and forth about it in the development of our mini class series. So I'm really excited that we're here today.

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Kendra Seymour
02:48
This is one of those episodes that I think every homeowner and renter should watch, because at some point, most of us have had to pick up the phone and call an HVAC company. Either we needed routine maintenance on our system. Maybe the system stopped working for some reason. It's no longer heating or cooling the home. Or maybe you're in the position where you have to replace the unit. And I know firsthand just how overwhelming that that can be, especially if you're not familiar with some of the industry logo, and it's hard to know if what you're being told, if what you're being sold, is really what is, best for your home. And so we're going to give listeners today so many key things to ask and listen for, and vocabulary that they need to know so that when they pick up that phone, they feel empowered and they can make an informed decision. So I love this. Let's start off, though, with just some of the basics. What are some certifications or licensures that contractors should have?

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Becky Callegan
03:51
Yeah, so starting out this area can be a little gray, because depending on the state that you live in, there actually may not be any expectations or any requirements for any licensing at all, which can be a little frustrating. Um, but baseline, no matter what mandated by the federal government, it is a law that any technician who operates and uses refrigerant does have to have an EPA certification to be able to use that refrigerant. They have to go through a little test and get a certification. And again, that's put forth by the federal government. So that's something that everybody should have. And also it they will issue a little card, a physical card. I kind of chuckle, because it's, it's a staple in my husband, AJ, wallet like his old, raggedy, tattered, 25 year old EPA certification card. So that is something that if you wanted to go above and beyond, you could ask for, maybe not necessary, but you could as a safe, precautionary. So that's baseline, minimal. Above that each state and or municipality could require that the company and or the technician license themselves as a mechanical contractor in that state. Again, not all states may have this, and it kind of is like a pyramid effect. So if the state requires that they become a licensed mechanical contractor on top of that, each county and or municipality that they operate in could also require licensing and registering with that state, and those are all things that you can check up on on your Secretary of State's website usually.

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Kendra Seymour

05:32

That's great. So that's that's like the required legal state and or federal requirement. But then, as an industry similar to how the remediation inspection industries, there are additional trainings and certifications that are out there, but it's hard to know which ones are maybe more meaningful in terms of like, the education and provided. So can you speak a little bit to like, what industry certifications would be good starting points, in your opinion,

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Becky Callegan

06:01

Certainly. So there are different organizations like ACCA, which is the Air Conditioning Contractors of America, and they have NCI, National Comfort Institute, and that's just a few drops in the bucket of things, organizations that contractors can partner with, can become members of, to be able to access their continuing education opportunities and or certification opportunities. And so even if a contractor decides that they want to take a course or go to a conference or training that some of these organizations offer; one the course may not offer an actual certification after you complete it, but again, we gain some valuable knowledge that that will help us serve our clients and serve the community better and or sometimes that contractor, if they do this so much, they might not even file or request to get that official certificate to be able to hang on the wall or show as document. But again, organizations like ACCA, NCI. Also, I will mention a lot, internet has given us the opportunity to do a lot of things online. So some well known, again, industry specific, would be HVAC School out of the out of Florida. Also, there's a organization or a group called the HVAC Grapevine. Those are all kind of internal, very, very industry specific HVAC groups that a contractor can get a wealth of knowledge. So this, when you get plugged into these organizations and these opportunities with these groups, it really creates a really good network of individuals to kind of help feed off of one another.

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Kendra Seymour

07:48

That's excellent. And we're going to link to both those in the show notes, so if you're watching the video on YouTube, you'll be able to see the ACCA and NCI links, and you can search by zip code, because we always say certifications are minimum starting points. I wish it was as simple as yes, you have the certification. That means you know everything that I need you to know for my home. But that's why we're having this conversation, and everything that's about to follow. All right, so let's talk about what happens if you are in the unfortunate position that you have to replace your unit sometimes that's called retrofitting. It's expensive. You want to do it once, and you want to do it right. I made the mistake of not asking the company I hired, and I didn't ensure that they were going to size my unit properly, and I ended up having a lot of issues that became very expensive down the road. So it's really key to get this right from the beginning. So if, if somebody calls a company and they're going to need a new unit, or maybe they've been told they need a new unit, one of the first things they're going to ask, or should ask, is, how do I know what size equipment I need when replacing my system?

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Becky Callegan

08:56

Yes, that's an excellent question. And something often that right, people aren't thinking about. You know, we obviously know that our house has a specific square footage, and yes, obviously we have a piece of HVAC equipment that might be in our basement, in our attic, and an indoor closet space. But right, even just using the verbiage of what size is it like? You don't even think of these specific verbiages. So it's a really good question to ask. So this is a process, this it's like an engineering process, is the best way to describe it, and again, to be able to put it in layman's terms, so that our community, homeowners and renters, can understand we want to look at this thing like drafting a beautiful piece of art. So when we ask, what size unit am I supposed to have some answers that I want to say first, that that we should not be hearing are, well, ma'am, customer, I'm going to size your unit based on the amount of square footage that you have in your house. So my grandfather was in this industry, and then I'm taking over the company, and he says that based on your square footage, we're going to go with a four ton unit because you have 2000 square feet. That is not what we want to hear at all. We do not want system size based on square footage. You will hear in episode 5A with Alex Meaney that actually scientifically sizing a system based off of square footage actually cannot work because the load for the house, the heat load, comes from the exterior walls, not the interior walls. And he does an excellent job at explaining why that that simply doesn't work. So we don't want to hear that we're sizing based off of square footage. We also don't want to hear that the contractor is so confident in himself and his years of experience that he's going to size the system simply based off of that. At the fact that based on my 25 years of experience, and I've worked on a ton of houses that, you know, look and act just like yours. I'm going to give you a three ton unit because that is what you need. We don't want that because, again, literally, as you will hear throughout this entire mini class series, literally, I think almost everybody touches on it, your neighbor's house, your parents home, the person who lives across the street, the person who lives in the neighboring neighborhood. There could be similarities in these things, that maybe you had the same contractor build the house, or it might be a production home build, that doesn't matter. Each and every individual home operates differently, the way that you operate in your house the way that you may cook or you keep doors closed, God forbid, the way that your house faces. You might have a southern facing house versus a northern facing house. All of those things make a difference, and so we're not sizing based on someone's experience and the fact that they were in a home that could have been maybe very, very, 99% similar to yours. That does not mean that your house needs the same piece of equipment. That is an unacceptable answer. If a contractor is making a judgment call on your HVAC equipment based on his years of experience of work, his or her years of experience of work. Next we don't want to, again, we're not going back to that rule of thumb type of thing and and swapping old equipment for the same exact thing. So if you might be living in your house and you didn't have any HVAC issues prior, and you had a four ton unit, now the technician is coming in and they said, Okay, well, it's time for replacement and because you have a four ton unit, I'm just going to go ahead and put another four ton back in here. We really don't want to go that route, because, again, it's somewhat of a guessing game. Equipment is new now that previous equipment you had, even if it's only five years old, which that's a red flag if you're replacing it after five years, but it could be 20, 25 plus year old equipment, and things are different now. Manufacturers are manufacturing things different now. They operate differently. Again, a highlight that I love, that multiple of our presenters in the mini class series pointed out, the more efficient we're getting with with HVAC equipment, really the less effective it's becoming at removing moisture from our homes. And as a community that could be facing mold issues, sensitive to environmental issues, moisture is the number one thing that we need to be aware of in our

homes. And as we become more efficient with HVAC equipment, energy wise, we become less efficient at managing moisture. So again, we don't necessarily want to do a swap for swap. That, in my opinion again, you'll hear me mention multiple times as well as other presenters, if we're not testing, we're guessing. So doing a proper design is a mathematical process, an engineering process that's going to get get all the guesswork out. I like to connect it to again, so that you can relate to real world things. Think of your home as similar to your body. You're not going to go to the doctor and say, Hey, Doc, I have an infection in my toe I need you to amputate it. Like we need to do some testing first. We might need to get an x-ray of that, you know, extremity. We might need to do some blood work to see what's going on. We might need to take a swab of some different things, like, we need to do some testing to be able to make a proper plan and protocol to move forward. It is the same thing with our HVAC equipment. We want to do some testing to be able to make the best plan moving forward. So I mentioned what we don't want to hear. Some things that we do want to hear is that the contractor is going to go through a process, what's called the manuals. So it's ACCA, the Air Conditioning. Contractors of America, they have set forth guidelines for design, installation, sizing of your HVAC equipment. So if you have a HVAC contractor that's familiar with these manuals, that's a check on the pro side. So they're going to actually do a process with Manual J, which it could also be called a load calculation, or even some contractors may call it a J load but all of those terms mean the same thing. That's a Manual J that's going to give us a load calculation on on your home. I'm not going to get into details about that if you want to know the details about that watch Alex Meaney's episode, episode 5A and he goes into specific details about what all that is. But again, we want that. We want our contractors to be doing a Manual J load calculation. Next from that is going to be a Manual S. That's a system selection. Once we have the Manual J in those calculations, then the Manual S tells us what size equipment that we need to pick. That is ultimately the manual that we need to be able to pick the accurate size equipment for your home and your family's needs. And then further on that, we have Manual D, which is the duct design. Obviously, that's super critical and important, because ductwork is a part of this system. So can't have ductwork without the system. And then in some special instances, the contractor may go as far as to do a Manual T. That probably is going to be a rare case and a retrofitting scenario, but for new construction and or if we have some type of anomaly or unique design with high ceilings, lots of windows and stuff like that, they may go into a Manual T. But if they don't, I wouldn't say that that's a red flag. Just be prepared that if they do want to do a Manual T, that that is acceptable. So we have our four basic manuals, Manual J, Manual S, Manual D and Manual T. We want the contractor to be doing those things to properly size the the equipment and the system for your home.

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Kendra Seymour
16:55
Yeah, and I think it's important, because if you're going to invest money in a new system, which could be 10, $15,000 even more, depending on the number of systems and where you live, you want the equipment that is going to be best for your home. It is not like buying a refrigerator. We have a whole number of episodes on that. You can't just pick one and plug it in and call it a day. So the Manual, J and S, D and T, is that something that people should expect to pay for to have that done and to get those calculations done for their home?

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Becky Callegan
17:33
1,000 Percent! HVAC technicians are professionals. They pay for training to learn how to do these manuals. They pay for software to be able to operate, and it's a continuous subscription payment, you know, annual and or monthly to have access to the software needed to do the calculations. They also have to buy special equipment a lot of times or tools to be able to execute these things in your home. So yes, you most certainly need to be paying for these things. Also, again, let's connect it back to the body and and another, you know, well respected professional in our communities are doctors. You would not go to your doctor and he say, Okay, we need to have some blood work done, and we need to have some X-rays done today, and then you don't get a bill for that, like, unfortunately, that's just not how it works in the medical industry, and that's also not how it works in the in the HVAC industry. And we shouldn't have an expectation that it should. This may sound brutal and harsh, but really, and it's kind of comical, but cheap work isn't good, and good work isn't cheap. Like keep that at the forefront of your mind when you're dealing with with your HVAC system like this, is a critical, crucial piece of equipment in your home that is really going to dictate not only the the health of your built environment, but also your health somewhat, maybe more than the supplements that you take, or the the doctor that you see, like this piece of equipment in your home is is really vital and and can be life or death. So let's not devalue that contractor, that professional and or the services that they would like to offer you. Again, all of that is within reason, like we don't want to be oversold, and we'll get into some conversations and some scenarios about that, but yes, you want to be paying for the manuals. And to be completely honest with you, if you're looking at a new construction and you're building your home and or retrofit situation, and the company and or technician does not offer you these services, that's a red flag. So I wouldn't even want to go with that contractor that's not willing to sell me those services or gives me the option to opt out of them. This process is also going to take time, so circle back on the cost. If the contractor is offering you the load calculation or the ductwork design or the HVAC design for free, they're not doing it. Again, you will hear this in multiple of our episodes. If they are offering this service for free, they are not doing it. You are not getting it, and you don't even want it from them. If they're offering it for free. If they tell if they come into your home and you ask this question, how are you going to size the system, and they say, Oh, well, I did it before I arrived, and I have a satellite program that helped me do that. That's a no. That's a no go, like the satellite doesn't have X-ray vision. Alex Meaney mentions that I stole that line from him. So they the satellite can't see inside your home. It doesn't know what your behaviors are. It if the contractor walks in and tells you all of these things, those are red flags they did not do the proper design process. So again, time. When the person comes in and and they're having the conversation with you to be able to replace the system, that's that can be a multiple day process. From your initial call, let's say day one they come out, they tell you that you need a new unit. It might be another day, maybe two, before they can get the same person out, or another piece of the member of their team to come out and take all the measurements required to properly do these calculations. And then they're going to take all of that data that they gathered and probably go back to their office and maybe need a couple of more days to be able to put it through the software and do through the programming, to be able to design this. So this could look like a multiple day process, again, depending on the size of the team and how familiar they are with everything. So give some grace and be prepared that it's not just an overnight, it's not an instantaneous and really, it's not like a two hour return time and then, bam, we're done. This is a process that we need to plan for. And again, you want that.

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Kendra Seymour
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I think that's really helpful, because this is not a step you want to skip. So if you're replacing your unit. You're going to pay for the Manual J and S to be done, and you explained, I think, very nicely why, right? It's, it's numbers and calculations unique to your home. Again, Episode 5A and 5b gets into that in more detail. Because if people think, Oh, it's a free quote or an estimate, well, if you're getting a free quote or an estimate, you're essentially getting a sales pitch right to buy my services, to buy my equipment, so you're paying for this diagnostics to be run, and that is the first part. So one of the things that I want homeowners to know that they should be able to ask for is, should they be able to ask for a copy of the manual, J, S, D and T, if they pay for it?

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Becky Callegan
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Yes, definitely. So it might not be something. Let's say you do have a proper contractor and they are running these things. They may not automatically offer that to you, and that is okay, but most definitely, if you have paid for it, then you can ask for a copy, and they should be more than willing to give you a copy. So actually, and again, to our community, I would advise asking for a copy of that just because we do want to ensure that they're doing the proper process and that they're not, let's say, copy and pasting someone else's Manual J or load calculation or duct design, and they're just trying to do like a cookie cutter thing to your home. So if, when you're asking for a copy of those reports, a couple of things that we automatically want to look for is like, I know this sounds so simple, and excuse my language, but someone asinine, but you want to make sure that your name is on, that your address is on, that your correct zip code is on that. So ACCA sets forth the standards, and there are certain guidelines that the contractor is mandated to follow based on your geographical area. So we're we will be releasing an article, and in my article, I mentioned these things, but so my specific zip code, the areas that the con, the HVAC contractor, has to get for to do the calculations, or probably both of them, are probably a good 50 miles away from my actual zip code. But again, like I know that it's a zip code in my state, and I know that it's in my area, so they're not using your zip code, for example, to get the calculations for my home in Louisiana. So that's something that we want to make sure of. We also, again, these papers are very technical. They're very easily manipulated. And also, right as a consumer, we may not always know what we're looking for, so it may be very hard to spot some of these manipulations and or red flags. That's why I'm mentioning these things. But certain things that you can look for are also the number of occupants in the building. If you have a family of five living in your house and they have that 10 people live there, more people add more heat. So we don't want that. That could be oversizing the unit, which, again, we don't have to get into details, but our mini class series covers the detriments of oversizing HVAC equipment and how that can literally make or break your home, your health, all those things. So you want to look for the number of occupants. Um, you want to look for things that, um, temperature. So again, if I live in an area where it could get 100 degrees very often. But again, ACCA mandates that the design temperatures are set by a certain certain criteria. So like, I think our design temperature in our area might be between 92 and 95. While, again, that's not always an instance in my community, in my in my area, that is what the mandate is. So again, if I see 110 or if I see above 100 like I know that that's wrong.

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Kendra Seymour

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Yeah, and I think you know you were kind of poking fun, but unfortunately, the reality is it has happened where they will hand over paperwork because they didn't actually do it, and it's paperwork and numbers for somebody else's home, and they didn't do a good job covering their tracks. So you want to actually take a moment to to read through it, even if you're not 100% sure everything that it's saying you know the details of your home and some of those unique things. And if they don't match up, you want to certainly ask questions. So in addition to when I'm calling, I'm asking for this, you know, Manual J and S and D and T, if it's applicable, I want to ask them, though, how do I know that the equipment has been installed properly? So one of the questions I might ask is, do your contractors commission their work. So what kind of answers would I be listening for if I ask that kind of question to the company I called?

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Becky Callegan

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Yeah, that's a good question. So, and also, I want to take this moment here to be able to highlight just that word in general, commissioning. So as Alex mentions in his episode, and I want to reiterate here a calling that we have at Change the Air Foundation is to empower and equip our community to be able to make informed decisions. So through this very surface level but somewhat technically deep HVAC mini class series, you're going to hear a lot of words that maybe you're unfamiliar with and and again, this kind of geeks out, and we kind of nerd out and get into the nitty gritty of HVAC. So absorb from it what you what you can and what you're able to and watch it in increments, but gain some vocabulary, some key vocabulary, so that when you're making these calls, you can be listening for words and or prepared to have intelligent and empowered conversations, to make great decisions. So just that word alone, commissioning. If you call up a company and or you're walking through the process of potentially hiring a company to retrofit, to replace, to change out your HVAC equipment, or if you're a new construction and they're gonna, you know, you're gonna ask, what's the process upon completion? If they don't, one time, use the word commissioning, then that could be a potential red flag that they're not doing it. So just the fact that you know that word really kind of sets you apart from from some others, and it kind of elevates you from the beginning. So the process of commissioning. Cody in in his episode, he does a great job at explaining that make makes it really practical, very consumer friendly. So I'm not going to take away his lightning and thunder there, but commissioning is basically the process of checking at the end of the job that the work was done properly and that it's done according like and it's going to operate according to manufacturer's specifications and or the specifications at which this whole design process told us that it should be operating for your home and your family. So like, Kendra, you like to give a good example of in the remediation process, it's like doing post testing. Maybe look at it in the medical industry as you know, we're going to go through PT and or we're going to do a final swab on that wound to make sure that all the infection is gone. So this is kind of the after product, the the triple check, that things were installed properly and things are operating according to how I paid, and you told me that they should be operating. So to circle back on things, one, do we need to be paying separately for commissioning? While it is a service that should be offered, and you're going to be paying for that, just like the manuals that we discussed, I I may not necessarily want to work with the contractor that this is an option. So I want him and he or she as a contract. Or should really want to be checking themselves to make sure that their staff, their employees, that the team, is working and delivering the job that they said that they want to deliver. So

again, it shouldn't. It shouldn't be an elective. I like that word. It shouldn't be an option that we've added on. But yes, is it something that probably is going to be worked into your estimate? Most definitely. Like all of these services, just like in the medical industry, these professionals are paying to learn training, to learn how to do they're buying and purchasing and investing in tools to be able to execute these things and give you these services. So most definitely, it is something that you will be paying for, regardless if it's a line item on the estimate. And again, I think one thing that we wanted to talk about and mention is, is there an actual physical report, like, how do you know that they did do the commissioning process, and that they did check it. Every contractor is going to be different. Cody mentions a program and a software called Measure Quick. It's it's a program that's very, very, very familiar in the HVAC industry, especially high performance HVAC professionals who are have a building science mindset, and they have a home performance mindset. Which those really, at the end of the day, those are the type of technicians that we want to partner along with and or work as a collaborative team to be able to operate with. Are professionals who are familiar with building science and who are familiar with home performance. So Measure Quick, again, is a tool. It's a software that they utilize, and they have programs and opportunities again, it, it's something that they set up and it, it will actually give them, essentially a report card, not only for themselves, but for your unit. So yes, and if they're not using Measure Quick, that's not necessarily a red flag. They might have another program or another software that they are using, but similar concept and that it's giving the system, and it's giving the technicians a report card, a grade, to let us know how well we're performing. So of course, right? Like we want to make an A on that, we may not get 100% and that's okay, but we certainly want a high percentage of performance and striving for that A grade?

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Kendra Seymour

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No, absolutely. And like you said, Episode 10 with Cody is fantastic. It's short, it's funny, it's got lots of tips. It shows you an example of the report, everything that you need to know about commissioning. And if you're replacing a unit, you 100% need to watch that episode. Because if you think that, like I did, this is their job, they install it. Of course it's going to work. It would be a rare instance that it didn't. There is research out there showing that, you know, I believe it's up to 70 to 90% of air conditioners and heat pumps have at least one performance compromising fault due to improper installation or inadequate maintenance. So this is not just a fluke thing. It happens all the time, and if all they're doing is saying yes, it's blowing hot or yes it's blowing cold, it's working, that's not commissioning. So I love that tip. It's super important that you as a consumer know to ask for that and that it should be included in your buying of a new system. So what kind of warranty should I expect? Because no doubt that comes up when you buy a new piece of equipment. Can you give us some tips there and what we should be asking on the phone when we call?

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Becky Callegan

33:40

Yes, totally. So automatically, off the bat, when you get a new piece of equipment, the manufacturer, they have set the guidelines as to what the warranty will look like, and when that HVAC contractor agrees, they actually get into contract with distribute distribution companies to be able to sell that particular brand equipment to you as their client. So there are specific guidelines that the contractor has essentially agreed to follow per the distribution and the manufacturing guidelines. So automatically, pretty much across the

board, every manufacturer will give you an automatic five year parts parts warranty for that piece of equipment. That's automatic. Again, a lot of times when you're looking through advertisements, or you're on the contractor's website, or even on the phone call, through the conversation, they're going to tell you that it's going to come with a 10 year manufacturer's warranty, and they're not wrong in that, but the key is, is that to receive that 10 year warranty, the equipment has to be registered. So what comes to mind is, you know, when you do buy that new refrigerator, or even something as simple as like a toaster oven or whatever it comes with that little card in the mail that's normally has pre postage on it and it says, register your warranty. It's the same with your HVAC equipment. If that piece of equipment is not registered either by you, the homeowner, or by the HVAC contractor who did the installation for you. Then after year five, that warranty is is no longer. It doesn't exist anymore. So if they advertise a 10 year warranty to you, but they don't register the equipment, you don't get that 10 year warranty. So the key piece here is that you want to get that warranty registration in hand. Either in hand as a physical printout or as a download, an email, a PDF on your computer, but sometimes it's out of sight, out of mind. But I definitely, definitely, definitely want you to be asking about if the contractor has registered that warranty for you, and ask for it within the within the first 30 days. So if you're at day 15 and you haven't heard back from that contractor and or gotten a copy or heard about that registration, you want to go ahead and make a phone call or send an email saying, Hey, I'm following up. Do I need to register my equipment? Or is that something that you've taken care of for me? And if so, can I get a copy and then you stick it in your home file. If you have to register the warranty yourself, um, I'm sure there's going to be instructions in the instruction manual, but you would likely go on the brand name piece of equipment website, and then somewhere there, there's an opportunity for you to register that warranty. And you will need some information like the the model number and the serial number and those specific things. But definitely you want to be asking for that. In terms of labor, it's pretty industry standard for a contractor to offer a one year labor warranty. That's kind of, again, industry standard. So at that point, if anything fails within the first year and you have to have a call back, not you shouldn't have to pay for anything with that new piece of equipment. Again, if we're having commissioning, if we're doing design, that, essentially, the contractor should be looking at that as insurance for them and their company, because callbacks cost money. So again, if they've gone through proper business training, you know all these trainings that on the business side, this is something that that companies are informed on. You want to eliminate callbacks, because they cost your company money. So again, this is another piece of why, really, they should be offering you design, commissioning, because it's also beneficial to them. So on a last note on warranties, depending on the type of equipment that you get, some higher end equipment, more efficient, higher SEER rated equipment, the manufacturer does offer an extended, maybe 12 year warrant parts warranty on some of those piece of equipment, and they also require that the contractor offer you a two year labor warranty. So again, that you're going to find that probably more on more high end equipment. But again, it's something that you can inquire about once you figure out what piece of equipment you're going to pick for your home.

KS

Kendra Seymour

38:15

Yeah, and don't forget about that add on equipment if you ended up adding, like a whole home dehumidifier, that's something that you want to make sure that warranty is filed as well. That's super helpful. So now that we have this new system, or maybe we're just trying to, you know, maintain a system, which everyone should be doing, talk to us about what we need to know about routine maintenance. What

are we listening for? What are we looking for on the website. What should we expect to happen in our homes?

BC

Becky Callegan

38:43

Yeah, so that's a good one, and it it's a big topic. So as you mentioned, we should not be skipping maintenance at all, really, again, like sometimes our HVAC systems are out of sight, out of mind. But I want to drill home is that this piece of equipment in your home is one the biggest piece of it's the biggest appliance that you should be investing in. You should be giving it top priority and attention, because whether or not you realize it, like I've said it before, and I'll say it again, and I'll probably say it again, your HVAC equipment impacts your health, probably larger than any other component like that in your home, definitely. It impacts the health of that building, that home, and also it impacts your health, as a lot of members of our community know so well. So I like to say a minimum of having having that piece of equipment service two times a year. So typically that, you know, will look like seasonal maintenance. You'll have the company come out, usually in the springtime before, like the on demand heat of the hot summer, and then also in the fall season, or very, very early winter, maybe, like before we're getting ready turn that the heater on. We want to have it checked up those two times and again to to bring impact to this, to bring awareness to where you're thinking about it on other levels, your doctor, your insurance, your medical insurance, requires that, usually, you have an annual physical. Have your blood drawn at least once a year. It's recommended you go to the dentist, you know, every six months. So HVAC is the same thing. Your automobile. You wouldn't think about driving your automobile 100,000 miles, you know, for two years post purchase, without having any type of oil change or maintenance done. It's the same thing with the HVAC system. Think of it as we want to go ahead and do that oil change on this at least twice a year. So companies could offer different options and and again, this is something that I know for myself. I get mailers in the mail. We have a little home magazine that circulates through our community. It is chuck full of coupons and advertisements for HVAC contractors offering these maintenance things. So sometimes it's called the tune up. Sometimes it's called the seasonal maintenance. What I want you to focus on is that two things here. One, we want a physical cleaning of the system. We don't just want a visual inspection. And I'll get into that in just a minute and give a correlation that really will help ding the bell. And also, a lot of times when we see companies offering these promotions, like a $99 or $79 Unfortunately, I've seen it as low as like 39, $49 tune ups. There is no doubt in my mind, I can 100% guarantee you that if you book an appointment with the utilization of that coupon and or promotion, you 100% will be up sold on something. Larger companies are actually the technicians. I have been told inside the industry, by people who have transitioned that they are required to the point that they will actually get reprimanded if they don't have a minimum sales ticket, especially when they are calling upon an appointment that is underneath this 99, $79 tune up promotion. Like they will literally get in trouble and risk losing their job if they don't come back with a ticket that's X number of dollars. So I can guarantee you you're being up sold on something. So we don't want to, unfortunately, utilize those things. Again, remember the line that I said, Good work isn't cheap, and cheap work isn't good. Another kind of side note. A lot of these smaller Mom and Pop, or, you know, used to be maybe like 10, 15, employees or less that you know, started off as Mom and Pop HVAC companies. It's a big, big, big thing right now that larger entities, larger corporations, nationwide, who don't even have knowledge or anything about HVAC, but they're business people. They are coming in and they are buying up these smaller companies, multiple of them, and they stay in your community as like each of them, individually branded, but they're no longer owned by that individual, you

know, family or business partnership or whatever. It's now kind of like a hedge fund, equity thing that they're getting bought up by these things. So again, the focus in those companies are sales. They are very like they spend a lot of money investing in their employees and sales training. Some again, I'm going to get off of this in just a minute, but some of the red flags for that are, if you're being sold like a good, better, best option, a Cadillac versus a Toyota, a entry level versus high end option. My husband and I, AJ and I, have gone through when we were strictly HVAC and we didn't know what we know now. We went through professional sales training. So again, if, if they're offering you a three tier thing, you can pretty much identify that they've gone through professional sales training. These people can get aggressive. They can somewhat be bullish. So that's where I want, I want everybody to listen to Alex Meaney's episode 5b the latter half of that, the last 30 minutes or so, he gives really good, practical advice on, you be bold. You be empowered. Make a statement. I don't want to be up sold on a UV light. I don't, you know, make statements like that, and if that gets ignored, it is okay for you as the consumer, for you, as the homeowner, for you, as the advocate for your health and your family's health. It is okay for you to say, I'm sorry, I don't think that this business relationship is going to work, and I need to end the appointment. That is perfectly okay, or definitely don't call them back. Um, so back to the maintenance. Most of the time they have a checklist, so you can ask for a copy of that checklist. Sometimes they also offer maintenance plans where, again, it'll show you what what is done at which season. That's also very, very helpful. And to go back to the physical cleaning, that's what we want. We don't just want a visual inspection. And when you think about this, I want you to think about going to the dentist. So when you go to the dentist for your, you know, twice a year, cleaning, personally, me like I wouldn't want to go to the dentist, sit in the chair, have them do the X-rays that they do. Have the dentist come in. He looks in my mouth, tells, you know, bite on the back teeth. And then he says, okay, everything looks good. We're done. No, like, I want that hygienist to get in there do the physical cleaning, manually remove the plaque build up over the last six months. That is what we want in our HVAC systems. We want to physical cleaning and a removal of the dirt, the dust, the debris, of all those things that have built up in our system over the course of half of the year. Um, again, just to mention, we'll be launching an article that specifically highlights these things. There are excellent pictures in that article that you can go back and look at. That you will literally see physical dirt, dust, it's nastiness. It's so disgusting. Build up in drain lines, build up on evaporator coils, build up on blower motors and and we want that physically removed. In addition, this is a time to replace filters. Every situation is different when it comes to filter replacement. Some people, depending on the type of equipment that they have, they may only be changing their filter once, maybe twice a year. Some people, depending on, again, depending on the type of equipment that they have, the home that they have, if you live on a ranch, if you have horses, lots of pets, animals, you might need to change your filter as often, as frequently as once a month. Again, that's a conversation you have with with your HVAC professional. But this is also a time to be cognizant of we need to have that filter replacement take place. And last to touch on this. So some of the services that I mentioned that might be recommended or need to be done with evidence, we want to ask for evidence. Evaporator cleaning, evaporator coil cleaning and or blower cleaning and stuff like that. Those are services that are going to cost more money in addition to the cost of your routine maintenance, because it's very labor intensive, it typically requires that that ancillary piece of equipment be removed out of your home to be cleaned. A lot of times, depending on you know how bad it is. It's not able to be done, you know, up in your attic or down in your basement or whatever. So again, be prepared to pay for that extra. But again, we want to make sure that it's not an up sale. And so we want to see if you can visibly see it with your own eyes. Have them show you. If it's an area where you can't access for whatever reason, ask for pictures. And again, not to be overly like cautious, but, you know, make sure that that is a picture time stamp and those types of things in your home. Um, last thing I will touch on maintenance, again, does take

time. It depends on the technician their abilities, but at a minimum, I feel like you need to prepare for an hour to an hour and a half per system to be, you know, to be able to be physically cleaned properly. Sometimes that might take two plus hours. Sometimes it might be, I wouldn't be less than 45 minutes, an hour. And again, if you have additional equipment that goes with that, the dehumidifiers and and additional filtration, those are also going to take add on time and and add on cost to to the normal maintenance. So let's talk about pricing quickly, so something that you may be able to expect, or what I would think would be appropriate pricing for a physical cleaning, really good maintenance that I would want done on my personal home is probably in the $199 or above range. I would think anything probably less than that, they're going to maybe up sale and or not do as quality of a job that I personally would want done. And another thing that I want you to be aware of, or red flags for maintenance contracts, are if they put in there, that if you have somebody else come and look at your equipment, that you negate the warranty, all of that type of stuff is a red flag. You should be able to have someone again, maybe not come and work on things, but at least come and look. If you have somebody who's a building scientist who also specifically specializes in HVAC, and you're having some issues, and you don't call your HVAC company and you call this person and they come in and make some observations, you don't want that HVAC contractor who you might be in a maintenance contract with to totally void that. So you just want to be conscious and aware of those things when you're getting into contracts with people.

KS

Kendra Seymour
50:30
Yeah, and that's helpful and and for everyone listening, Becky has a great article that goes into detail with all of the things on the checklist and pictures, so she didn't unpack everything that needs to happen. But thanks for the highlights, because you know, one of the tips too and perks of getting in a regular relationship with your HVAC company is I always ask for the same tech every time so that he is familiar with my system. He knows I'm always going to ask to see a picture of the coils if I can't be down there in person when he opens it up. And just a side tip for renters, be sure you're clear with your landlord about whose responsibility it is to service this unit. You can ask things like, when was the last time it was serviced? I have been a renter for a long time, when I was younger, and I never once maintained my unit. And looking back, it makes me wonder if the landlord ever maintained it between visits, and my guess is probably not as often as it should have been. So we'll link to the article in the show notes, because Becky did a great job there. So let's talk about now the third scenario, troubleshooting. This is always the one where, because your chances are you're panicked, right? Either it's hot out or cold out, and you need either heat or air conditioning, and so you kind of feel like you want the first person who can get there and get the issue the fastest. And you never know, are they quite taking advantage of you? So let's talk about some troubleshooting tips and questions and things for homeowners and renters. So what should I expect if my system isn't working and I call a company and I say something like, my heat's not working, or, you know, there's uneven temperatures, or whatever it may be, what am I looking for?

BC

Becky Callegan
52:16
So first things, first off the bat, like we've mentioned multiple times, like be prepared to pay for that technician to come out and take a look. So in the industry, that's going to be considered a diagnostic fee. So again, like the doctor's office and a copay, it's it's the same thing you're going to need to pay for that

technician to get in his vehicle and come to you. Again, we don't necessarily want an automatic diagnostic over the phone. We do. They need to come out. They need to be putting, you know, tools on things. We need to be testing. So in our, you know, group of colleagues and mentors, they like to say, like, if we're not testing, we're guessing. So that's essentially what it is. And again, think about it with the medical industry, you wouldn't go for surgery, for open heart surgery, without having an echocardiogram or a stress test. You know, when having blood work done, that's that's just not something that takes place. It's the same thing with HVAC. Every situation is unique and different, and we can't just kind of make blanket statements about all of that, but the but what we want done is testing. We want people to come in to put equipment on things, and then I need physical data and proof that this is where and and how it's going wrong.

KS

Kendra Seymour
53:34
Here is a question that I know is going to resonate with a number of listeners in our community, what happens if the contractor opens it up and they find mold or other issues.

BC

Becky Callegan
53:45
So the number one thing, the first automatic thing that should happen is the contractor notifies you, and they tell you that that's abnormal. So I hear and AJ hears, and we all in this community, too often hear that, oh, this is normal. Literally, that is the statement. And it, it's infuriating. AJ was on a real estate inspection just this week, two of them, actually, and one real estate agent whispered it behind AJ's back the other real estate agent had the audacity to say it in front of him, and they literally said, Oh, that's normal, my house has it too or Oh, that's normal, every house has that. No folks, if you hear anything, hear this mold in an HVAC system is not normal! I want to break that cycle, because it is not normal. So that is, first and foremost, that it is a sign and a symptom of a more significant underlying issue. That issue is going to be related to moisture, but it is some underlying related moisture issue. So first again, first and foremost, I'm going to say it again if they find microbial growth in any part of your system, whether that be the air handler, the supply grills that supplies you know, air into your into each one of your rooms, if it's growing on the outside of it, if they remove it from the ceiling and we see some growth on the sheet rock or in anything around there, if it is in your ductwork, that is not normal, and processes and protocols and steps need to begin to take place, like an investigative process, to be able to get to the root cause as to what is causing this issue. It could be something super simple. It also could be something significantly complicated that then begins to bring in the whole home.

KS

Kendra Seymour
55:40
Let's do a couple examples, because that tends to raise the blood pressure of a lot of people a little bit more, and so your first thing is to stop and not panic. You're not going to rush and have them start spraying stuff into your system and duct work. This now potentially becomes a bigger issue. Needing mold remediation companies potentially, or an IEP, a building scientist to get to the bottom. So do you want to share? I know we each have a story to share. Do you want to go first? Because I think it it shows people the path they can take if this happens.

BC

Becky Callegan

56:13

So it is okay if your HVAC contractor is not familiar with building science, it's okay that they may be unfamiliar with how to move forward with mold or microbial growth or getting to the root causes of moisture issues, all of that is okay. What I want to hear that that professional state is that they are unfamiliar and that they don't know how to proceed. So that they they've been open and honest with me, so that then you can work as a team to bring someone else in, that they that that might be their area of specialty or expertise. So what I would like to see is that, and this is the story that I'll share, we had a new neighbor move in. This new neighbor was obviously unfamiliar with AJ and I, she had some HVAC issues take place. She called her HVAC contractor who she was already established with, and that HVAC contractor came out, and she had some areas of concern, not only with the the system keeping up and or some air balance issues, but also some visible microbial growth issues. That contractor did a superstar move. He told her, I'm not really sure how to proceed with this situation. I know that you need a building scientist. So he told her, you contact the building scientist, and then we'll revisit from there. So long story short, she Googled building scientists in our community, and she stumbled across my husband, and it happened to work out that we were neighbors. But the beauty of the story is that that HVAC contractor, he knew what he didn't know, and that's what I want professionals to be safe with, with stating is that I don't know about this, but they could say, but I do know somebody who does, and they help you, and they call that professional to come out, and they meet them at at your house with you, and then you work as a team, you know, to kind of walk through scenarios and do diagnostics together and get a plan to get things back in order. So again, know what you don't know, and make that HVAC contractor comfortable that that they're going to work together with someone else, like this whole collaboration thing. AJ, is not going to do the HVAC stuff for this neighbor. He's going to act as essentially the indoor environmental professional. He's going to act as the IEP. He's going to act as the building scientist to get to the root causes of the moisture issues in the building. And then their HVAC contractor is going to come in under the the guidance and the leadership and the partnership of the building scientists on how to move forward in the proper manner. So again, a lot of times, contractors don't do this because they're scared they're going to lose the sale. So kudos to them. In significant respect to the professional who says, I don't know about this, but let's work together. Let me call in somebody, or you call in somebody, so we can all work together to solve the problems.

KS

Kendra Seymour

59:30

So there can be multiple reasons why an HVAC system develops microbial growth, and there can be multiple places that this happens, right everything from the coils to the drain pan, to growing on dust and the duct work themselves. Sometimes you'll see microbial growth around the grilles and registers, and that's where you really do need to bring in that good indoor environmental professional. And if you're wondering or you don't know what that is, you can head on over to our website to ChangeTheAirFoundation.org, and click on our resource tab and the very first thing you're going to see is start here, and when you click on mold in the home, we'll take you through the five steps. And Step one is to bring in that indoor environmental professional who is going to do that investigation of the home, who's going to try to get to the root cause, the reason why moisture was allowed to persist and lead to microbial growth, and then they're going to write that remediation plan, and then you move on to finding a

remediator, in some cases, who can work alongside the HVAC company to take care of any issues. So I'll give you an example of this. I had a family member, and she actually discovered that her HVAC system and duct work had issues because she was bringing in an IEP to investigate the home because she had issues in her attic and her basement, and he was smart enough to know that I need to check the HVAC as well. So what did that look like all of a sudden now, it's not just remediating the attic and it's not just remediating the basement. She had the system that was throughout her home. And so her IEP had to work with not only the remediation company, but also an HVAC contractor. And so the remediation company built the containment, established the engineering controls, the HVAC company came in in PPE and was able to remove and fix the parts that needed to be fixed and replaced without cross contaminating the rest of the home. Because you're going to find that a lot of remediation companies won't touch HVAC issues because of some of the certifications that Becky mentioned, they may not have certifications to work with refrigerants and things like that. They may not have the training and skill set. So sometimes you are bringing in multiple people with different skill sets who need to work together. So if this is your situation, you discover microbial growth, stop, find a good IEP. Head on over to ChangeTheAirFoundation.org, click on that resource tab, and we give you all the information you need to know to find one. Because it should be no surprise to you, if you follow our stuff, not all IEPs are created equal, just like not all HVAC contractors are created equal. So we want you to do your homework before you find one. So Becky, is there anything that you didn't mention that you want to just say, or something you want to reiterate for the listener.

BC

Becky Callegan
1:02:24
We want that contractor who looks at things holistically, and we need to be getting to the root causes of the issues, not just band aiding over things, or not just treating symptoms in those instances, that's where, essentially, I heard a wonderful presentation out of training this summer where they said, in those instances, essentially, we're on a subscription service. So we can almost guarantee that if my ductwork in my attic is sweating and they added more insulation or adjusted fan speed or whatever, that's just a temporary fix, a subscription that I can guarantee, come next month, or come next season, or come next year, when the perfect scenario sets up again, I'm going to have to be calling them back for the same exact issue. So as I mentioned, you know previously, it's okay if your contractor doesn't necessarily operate that way, but, but he needs to acknowledge that. He or she needs to acknowledge that, and we need to have a team together that can work together to be able to get to the root cause of these issues so that we can fuel a better home, better built environment, a better indoor environment, which is guaranteed to fuel better health inside of our own individual bodies and the bodies of our families.

KS

Kendra Seymour
1:03:44
I love it. Thank you Becky, so much for being here and sharing all of your tips and wisdom with our community.

BC

Becky Callegan
1:03:50
Thank you so much. I truly, truly love this. Thank you.

KS

Kendra Seymour
1:03:54
And for everyone listening, whether this is your first episode you've watched our HVAC series or your last be sure to head on over to ChangeTheAirFoundation.org, and sign up for our newsletter, because it really is the best way to get great information and tips like this directly to your inbox. If you want to do a deeper dive into all things HVAC Becky has a series of articles on our website that you can search for covering all sorts of topics that will be available. So be sure to check those out and of course, the full series can be found underneath our resource tab. If you're watching on YouTube, just hit that like and subscribe button, and you'll be sure to catch all of our episodes and all of our future interviews. Thank you so much everyone for joining us in our 2025 HVAC mini class series. It has been a pleasure spending this time with you.