



What is HVAC Commissioning and Why Skipping it

Can Cost You with Cody Brasseal

SPEAKERS

Kendra Seymour, Cody Brasseal

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Cody Brasseal

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Right, the truth is, is that your cooling, your heating and your ventilation system is probably the most complex appliance that you want. The kicker is that it is also probably the most likely to be installed incorrectly.

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Kendra Seymour

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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 10. Your HVAC system is one of the most complex appliances in your home and also one of the most likely to be installed incorrectly. That's why commissioning is so important. In this episode, we'll explain what commissioning is, why it matters, and how it protects your home and investment, you'll walk away with the questions to ask, the red flags to watch for, and the confidence to make sure your new system works the way it should. If you're installing a new HVAC system, don't skip commissioning. It truly is the key to getting what you've paid for. A bit about our guest, Cody is the founder and owner of Acadiana Comfort Systems, a leading HVAC company based in Lafayette, Louisiana with over 20 years of experience in the HVAC industry, Cody has become a trusted expert in system design, installation and commissioning, particularly in new construction space. Cody has led his company to become a premier partner for several of the region's top home builders. The company designs and commissions every HVAC system it installs, without exception, ensuring performance, efficiency and comfort in each home. His company handles hundreds of new construction homes annually with a reputation for delivering consistent, high quality results through discipline process and thorough documentation. Cody is NATE certified and holds advanced training in HVAC commissioning and building science. His commitment to ongoing education and to mentoring others in his trade has positioned him as a leader and educator within the industry. His hands on expertise and real world experience uniquely qualify him to teach HVAC commissioning to both new and experienced HVAC technicians. With a passion

for raising the standard in HVAC performance and service, Cody continues to push his companies and industry forward, one home, one system and one technician at a time.

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Kendra Seymour

02:41

Cody, thank you so much for being here. This is, you know, one of the most important parts you and I were chatting before that gets overlooked, dare I say, the vast majority of the time. And so if you're just joining us for this episode, I'm going to recommend that you go back and you listened to some of our previous episodes. You can find those at ChangeTheAirFoundation.org, by going to our resource tab and finding our mini class section, because they're all there ready for you. But Cody, we want you to jump right in, because I can't wait to hear what you have to say today.

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Cody Brasseal

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Yeah. Well, thank you for having me. I think I'll just start with the truth. Most people think that buying an HVAC system is kind of like buying a refrigerator, right? So you you purchase based on which one has the best rating, and then you hire somebody to install it, and then you're done or or you, right? The truth is, is that you're cooling your heating and your ventilation system is probably the most complex appliance that you own. The kicker is that it is also probably the most likely to be installed incorrectly, even by like the most well meaning professionals, you know. So that's where this training comes in, and hopefully I do a good job with this. But my goal is simple, but I do believe that it's powerful, because it gives the consumer, you as the consumer, the power back. It's to give you the knowledge and the confidence, really, to be able to make sure that you get exactly what you pay for when you're investing in a new HVAC system. So it's not about fear. It's about the freedom. Freedom to be able to ask the right questions. Freedom to be able to spot the red flags. Freedom to protect your health, to protect your comfort and to protect your wallet. And I think it's funny that this training is brought to you by, you know, Change the Air Foundation, because that's exactly what we're here to do. We're here to change the air in your home and change the way that the industry serves families just like yours all across the country. So buckle up, because by the end of this hopefully you're going to know more about HVAC than most salespeople in the field.

CB

Cody Brasseal

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So we'll start with a simple question, right? We'll dive right in. To commission or not to commission. William Shakespeare asked, or did he I don't know. I may have it a little bit wrong, but you know, to commission or not to commission, that is the question, right?

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Cody Brasseal

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Our goal is to equip you with knowledge and assurance that you need to ensure that you truly receive the value of your investment when purchasing a new HVAC system.

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Cody Brasseal

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So what qualifies me to be able to do that? And the truth is that maybe I'm not qualified, right? But here are a lot of words on a page that are going to hopefully convince you that I'm qualified, right? But I think, like, more importantly, what it does is it does support the idea of our commitment to growth, knowledge and excellence at Acadiana Comfort our mission statement is to exceed the expectations of every customer, every time, and our motto is, we test and we don't guess, right? So, you know, we believe that the only way for us to be able to achieve that goal is to continue our education, to sharpen our skills and so we've done that, and we have, you know, gotten building science certifications. Our technicians are NATE certified. We are an ACCA QI Certified contractor. We hold a mechanical license in the state of Louisiana. Been in business for 13 years, and we have a duct leakage and blower door certification as well, among other things, but these are some of the most important, important to us.

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Cody Brasseal

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So I want to debunk, and I've spent the last probably five years debunking the myth that cold is a measurement, right? Cold is not a measurement. Cold is not a metric. It's not a good one. And we have to stop allowing people to be able to come in to to install, sell us a product, and then at the end of it, use, you know this,

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Cody Brasseal

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This archaic tool called the handometer to tell you that they've done a good job, right? So they, they raise their hand, yep, it's blowing cold. It's it's all good. We're good to go. And then they pack up and they leave, right? And so how do we overcome this? How do we get rid of the the the handometer at the end of the installation?

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Cody Brasseal

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And that is, quite frankly, it's just called commissioning. We need to find someone who is going to provide an additional service to the installation. That service is called commissioning, and that's what the topic of today's talk is about.

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Cody Brasseal

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So the question, what is commissioning? Well, commissioning, quite simply is this, the verification of proper installation and operation? So I'm going to read it one more time. It's the verification of proper installation and operation. Okay, commissioning does not start until the install is finished. It is an additional service. It is now, it should be included in every service. But I want to draw this hard line in the sand to make sure that you understand that it commissioning doesn't start to the install is finished, and if

the contractor turns the unit on, collects his check, picks up his tools and leaves, you did not receive commissioning, right? So very, very important hard line here, that if they pick up and they leave, they turn it on, it works, and everything's good. They give you the thumbs up, they use the handometer, and they walk out. You did not receive this commissioning.

CB

Cody Brasseal

08:20

Why should we care, right? Well, why? Why wouldn't we we care about all types of outcomes. We care enough that we invested time, energy, effort. We shopped around, we collected information. We got three bids. We tried to make with this information the best possible choice, right? Because we wanted what, we wanted the best possible outcome. And how do we ensure that we as the consumer are getting the best possible outcome?

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Cody Brasseal

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We demand verification.

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Cody Brasseal

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I'm going to tell you a little story. So when I was maybe, you know, I'll say it like this, so I don't give away my age, but maybe, like, 10 or 15 years ago, we were headed to a family event, and I was riding with my mother, and she was, we were traveling through a small town, and we look up and there's blue lights in the rear view mirror, and so she pulls over to the side of the road, and this very nice police officer walks up to the window, and he's never met my mother, but he's about to find out. And he says, ma'am, do you know how fast you were going? And she says, yeah, I know exactly how fast I was going, right? I'm like, oh my gosh, here we go, you know? And he says, well, you were going, you know, 72 and she says, No, I was not. I was going 55, I had my cruise on, and she says, I want to see your measurement. I want to see where you clocked me going 72 and the guy refuses. The police officer was very handled the situation very well, and after like a short back and forth, she agrees to sign the ticket. And he leaves, and I'm like, oh man, that was awkward, right? And as he's walking away, my mother says, I'll see you in court. And I said, oh, you've got to be kidding me like, come on, let's just get it, can we please go? You know? And I didn't realize at that time just how serious she was, right? And so the eventually the court date comes around, and she shows up to court, and she sits in front of the the court, and she says, I want to see verification that that tool was calibrated before he went out that morning. And they couldn't provide the certificate of calibration. They couldn't verify that what this police officer measured was accurate. And so because of that, she, the ticket was dismissed and she left. And look, you can make the argument that the effort that she put in to beat this ticket was, you know, maybe not worth what she would have paid in the ticket, but I think it was a matter of principle, and it goes to show us that sometimes, if we just request verification, it could be a really, really powerful tool for us, right? So my mother is a perfect example. She fought the law in one based on demanding verification, you know. So, hey, don't get any ideas, right? It works for her. I'm not saying it's going to work for you, you know.

CB

Cody Brasseal

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And I want to shift gears a little bit to at the moment, because I want to take a second to kind of reframe what we thought was important versus what we should think is important. So as consumers, if we've ever bought an HVAC system before, then likely what we were thinking was that the brand was important, the brand and the price, right. So I want to shift a little bit to try and maybe give you a different perspective on that and the way I'll do that is by telling you one more story, then I promise no more stories for the rest of the presentation. But imagine that you're driving down the road, and you pass a car lot. In the front of the car lot, there's two beautiful, you know, GMC Denali's, and you look at him, say, oh, man, that's a beautiful vehicle. I'm going to pull over and I'm going to see you know what they're asking for that vehicle. And you pull into the car lot, and you're immediately met by a very eager salesman. And he says, Hey, how can I help you today? And you say, Man, I really love these two Denali's sitting in the front of your lot. Can you tell me a little bit about these two denali's And the difference? And to your surprise, the salesman says there's no difference. They're the exact same vehicle, they're the same color, they're the same make, they're the same model, they have the same mileage, they have the same everything. They're exactly the same. The only difference is that the one on the right is \$65,000 and the one on the left is \$55,000 and you look at the salesman, and you say, no difference, and one is \$10,000 less than the other one. And he says, Yep, no difference at all. So he looks at you, and with his hard close, he says, which one do you want today? And you say, well, of course what, the \$55,000 one, right? If this the exact same vehicle, I'd be a fool not to take the \$55,000 one. So he great, I get the paperwork ready, and you sign the paperwork, and you're getting in your vehicle, and you say you're getting ready to drive off. And you say, Man, I can't believe that this one was 55 and that one over there, same vehicle was 65, he says, well, he says, you know, they're the exact same vehicle. I mean, same everything. But you know, the the one on the right, the 65,000 was assembled and the in GMs plant by its engineers, and was quality control tested and put through a rigorous, a bunch of rigorous tests. And they tested the brakes and the coolant system and the engine and all these things to make sure everything was properly installed. And the one on the left, the 55 down, the one that you bought today, well, that one was assembled down to the local 4h by some children, and there was just no quality. But it's the same vehicle, right? Immediately your gut drops. You're like, oh my gosh, if I'd have known what, I would have probably paid a little bit more to make sure that I had this, you know, quality control tested value. There's value in that, right? And so that's ultimately what the point of the story is, that I want you to know that that's what's happening a lot of times when, whenever we are trying to decide which HVAC system. We're sold this illusion that we have all of these options and and that these options are the thing that is most important to us, right? I get prices is a very important factor when buying. But ultimately, what we think a lot of times is that, you know, it is

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Cody Brasseal

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The brand of the system and, and quite frankly, that is an illusion. And I can, I can show you, I can prove it to you.

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Cody Brasseal

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You know, Ingersoll Rand, which is one of the largest manufacturers and on the planet, they offer you three different options. But you probably wouldn't know that these three different options were built by the same manufacturer, right? RUNTrue. They offer American Standard. They offer their flagship Trane. Okay, so three different options made by the same manufacturer.

CB

Cody Brasseal

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Carrier Corp. Carrier offers you eight different options. Carrier, Payne, Tempstar, Arcoaire, Heil, Bryant, Comfortmaker, Day & Night. Same parts assembled by the same people, packaged in a different wrapping. Okay, so the illusion that brand really matters is just a false narrative in general. And so if, if we are now aware of this, then what is it that really matters? If brand doesn't matter so much, then what is it that we should be focused on to make sure that we get the value that we deserve as the consumer?

CB

Cody Brasseal

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And the answer is, is the assembly? Some assembly is required. We're going to take the same parts, we're going to put them and package them in the same order, right? And so it's common sense to us, now that we know this, that it is the assembly that matters, and then it is verified once it is assembled. All right? So now that I have your attention,

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Cody Brasseal

16:18

What does that verification and assembly process look like? Well, the the gold standard for verification of an HVAC installation is what we call the ACCA 310 Standard. Okay, I'm going to walk you through just a couple of points, and then I'm going to tell you how to request this information whenever you're requesting or you're or you're shopping for a new HVAC system. So you have step one design. What's the plan? How do you know? How did you pick what system that you're going to put into my home? If they're doing duct work, duct leakage. You install the ductwork. How do I know that this duct works not leaking all of my conditioned air into the attic? We have a test for that. We want to verify the installation. I purchased a three ton. Three tons is approximately 1200 cubic feet of air. How do I know that I'm getting 1200 cubic feet of air. That I'm not getting 1000 or I'm not getting 1600. Am I getting too little or I'm not getting too much? Well, there's a test for that. You sold me promises as you as the salesman sat at the sales table, and he's at the kitchen table, and he said, you know, the seer rating is, is the best seer rating on the market, your utility bill is going to go down. It did it and and what they're not telling you is that these seer ratings are measured and tested in labs. Do you live in a lab? No, you live in the real world. You live in the real world with real weather events. You you have, you know, animals, maybe you have children. You have just a whole lifestyle that may look different than the person living, you know, right next door to you, and so are you guaranteed to get that savings? Are you guaranteed to get, you know, that seer rating? Well, the answer is no, but what you could do is you could run a test whenever the installation is finished, and verify

that the seer rating that you paid for is the seer rating that you're getting, and lastly, is the refrigeration charge right. Is how did you decide how much refrigerant was going into the system? And so this is just a quick road map from Step A to step Z on what we're looking for, and the ACCA 310 Standard grades these installations based off of the amount of information verified from the install. Now, are you going to pull out the ACCA 310 Standard and read through all, you know, 74 pages of this? No, probably not. So I'm going to give you some things to ask for on the front end, right? Because if we think that in a 15 to 30 minute training that we're all going to become HVAC super techs. It's just not a reasonable outcome to expect. But what we can expect is there's a few things that we can ask for, and the answer that we get back from the salesperson or the service technician will give us a lot of insight into what kind of installation practices that the company that you are interviewing for your business may utilize when they're installing a new HVAC system.

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Cody Brasseal

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One of those is measure quick. Now there are different types of software that you can do this. Now this is a software that AC people will use to simply measure all of the things that we just discussed on the previous slide. So if you were to ask somebody, what software or what methods are you using to verify your work when the installation is done, and then just sit and wait. Wait and wait for their response, because one or two things is going to happen, they're going to immediately go, man, we use measure quick. We use this, you know? And if they don't use measure quick, and they use some other means, that's fine. It's not the software we're looking for. It's the response, right? Remember, we're giving you the power back. So sometimes when you're sitting in a room with the salesman, you feel powerless at some points. But if you ask this question, and you say, when you're finished with your installation, what means are you going to use to verify the performance of the system for me? And then just wait, right? And if they come up with something like this, then you know you've got a you've got a good contractor on your hands right now, if they start kind of school, well, we used, you know, in the sub cool and, okay, great, you've given me one metric. But what about the airflow? Well, you know, all these different things that they kind of, then, you know, then maybe this may not be the contractor for you. And why is, why is it important? You can see that this is a house that we've done. And the reason why these softwares are so awesome is because it gives you all the technical data, but they also have the consumer facing, where you don't necessarily need to see all the data, but it gives you a score. How did your system score. If you just paid \$15,000 and they hand you a Measure Quick report, and it says 69 you know, 70, and you've got a really, really poor grade. And immediately you're going to go, Hey, man, I need you to, I need you to explain this to me. Why? Why are we scoring so low? And so I really love the fact that Measure Quick has incorporated this kind of consumer friendly facing that gives you immediate, you know, an immediate view of how it's performing. And that has happened, right? We've had systems that we've commissioned, and they've been 100% on point, and we've had systems that didn't look so good, you know? But that's the power of commissioning. I can't tell you how many times had we not verified our installation, you know, that we would have been back in a week, that we would have been back in a couple days, that we and we were able to flesh out this issue right there on site, you know? So ask that question. It's a powerful question. If they tell you duct leakage test, if they tell you Measure Quick. If they tell you that they're going to use some sort of a standard or protocol, then that's probably, that's probably the contractor for you. So real quick, let's just review, right? I know we've given you a lot of information, but remember, the 310 Standard is very, very simple. You want to plan. How did you figure out what AC you want to put inside of my house. What was your plan and how

was it derived? Was it derived through Manual J, Manual S or Manual D? And if that's the answer, great. That's the plan. This is where we got the plan from. It's a great question to ask, ask if they're using certain tools, right? If we have to also be able to confirm the airflow. And airflow is the most important. At the ABCs of air conditioning state airflow before you charge. So we need to make sure the airflow is right. What tools are they using to measure the airflow? There's amazing tools on the market, like this one. This one's my favorites by The Energy Conservatory. And if they possess tools like this. I'm not saying they have to, but if they do, it does show you that these people, these contractors, are trying to do a little better. They're trying to verify their work. They're trying to be a little bit more accurate and precise, you know? But this is tools that we now have available to us in the HVAC industry that can help us to measure these things. So, you know, it's always a good, a good thing when you see that, hey, we're going to use the true flow grid, or we're going to do X, Y and Z, to be able to measure that. And lastly, have them use some sort of software like Measure Quick to be able to commission. So use this, not this. So we covered a lot today, and I know it's a lot to take in, but here's what I want you to remember, you don't need to be an HVAC expert to protect your home. You just need to be informed, right? Because when you understand how your system should perform, you're no longer at the mercy of a rushed install, vague promises or half done work, right? You're in control. So this training wasn't about selling anything. It is about just simply equipping you to ask the right questions, to demand the quality and to hold professionals accountable and to reward the ones that get it right. Because at the end of the day, this isn't just about heating and cooling. It's about the health of your home, the comfort of your family, and the value of your investment that matters, right? And so, on behalf of myself and Change the Air Foundation, I want to you know thank you for being here and stepping in as an advocate, not just for your own air, but for your peace of mind. If this message resonated with you, then you know, share about it. Talk about it. Ask about it. Be the change in your neighborhood, with your family, with your community, because when homeowners are educated, the industry has to do better, and that's what we want, right? Thank you again. Don't stop asking, and don't ever stop asking. Am I really getting what I paid for? Because you deserve nothing less.

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Kendra Seymour

25:22

Cody, thank you. So I couldn't agree with you more. Like the points you just made, the information you just provided, is so, so powerful. We talked briefly before we jumped on that I had a new system put in a few years ago, and I did not have commissioning done, and it was, it's been a little bit of a headache, to say the least. A lot more costly, a lot of time wasted, and even in the beginning, I thought I did everything right, so all of those things that you're talking about. The reason we're doing this series is we want to give homeowners and renters the tools they need so that they can ask the right questions. Right? We don't need you to be the expert, but we want you to be knowledgeable so you can advocate for yourself. So commissioning so important. I do have a couple of follow up questions, but I do want to give a plug, because you mentioned, like the Manual, J, S, D and T, for anyone listening Episode Five, it's broken into two parts with Alex Meany, we go in in a really easy to understand way what those are and why you want that done. If you're getting a new system, um, maybe retrofitting or your building, whatever. Listen to those episodes. We'll link to them in the show notes, and you can, of course, find everything over at ChangeTheAirFoundation.org, but Cody, so I do want to talk a little bit more about commissioning. Is this a separate fee that we should be expected to pay? And is it something that can happen the same day as the install, or give us a few more like of the logistical details for homeowners so they kind of know what to expect?

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Cody Brasseal

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Yeah, sure. That's a great question. So it's really up to the contractor, right? We so we commission everything. It doesn't matter if it's a, you know, if it's a lower cost install, or it's we've done, we've done installs that were hundreds of 1000s of dollars in these houses, and the lower cost gets commissioning. The the the more expensive gets commissioning too. But see, most homeowners are looking at system replacement. They're looking at about a one day, you know, a one day replacement and and so the or, and maybe they're just doing the air conditioning, maybe they're not doing the duct work, right? And so though we could commission the air conditioning, airflow plays a huge part in this, right? So it really just depends on what they're doing. I wouldn't expect someone who didn't change your duct work to run a duct leakage test, I would expect someone, though, to say, Hey, I'm not changing your ductwork. You know, we've agreed to just do an equipment swap, and here's what we're going to do and why we're going to do it, and we're going to take care of that, and then we're going to commission it whenever we're done. But I really see the need to be able to to to know what sort of sort of shape your duct works in. And I would, you know, recommend maybe doing a duct leakage test so we can kind of just see, let's just gage kind of where we're at, you know. And I would say that that would be a pretty consistent line of communication between a, you know, a contractor who knew what they were, who knew what they were after, knew what they were doing, and, and a homeowner, you know, so some of it could be part of the process, and then some of it may be, you know, an additional fee. And we've done it both ways. I've even offered, you know, people Manual J, S and D and or just a equipment swap, right? Because ultimately, you know, it's not our job to decide for you. Okay? It's our job to inform you and educate you and but it's it's your it's your money, it's your house, it's your decision to make you have all the power in the world. So if I inform and educate you and say, I really think we need a plan. I really think we need to address this duct work and maybe see kind of where we're at, and we need to do this. And you say, Listen, I get it all that sounds really, really great, but where I'm at right now, this is what works for me. Then I have to respect that, and I've got to, you know, and doesn't mean that we can't still move forward and help you to the best of our ability, and as long as we informed and educated you, I'm okay with it. So you know, we've done both. I think commissioning any equipment that you install, it should just be, it should just be absolutely included. But as far as some of these other services, I think what would happen is if the contractors incorporated them in every single bid. They would price themselves, maybe, you know, and maybe out of the market. If, if we had to do every single thing all the time, if it was literally just a replacement, you know. So I think that, you know, you could do it both ways. I think commissioning the system every time. As far as some of these other stuff, it just needs to be offer, discussed, and then, you know, you as the consumer get to make that decision.

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Kendra Seymour

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Yeah, and I love that, and I love that. It's something tangible you as the consumer can ask for, right? It's your verification. And for those who are coming at this, maybe you came from a mold and water damage situation, and now this is something you're paying attention to, not commission in my mind, is like the equivalent of doing remediation and not bringing back your IEP to do that post testing to confirm that it was done well. So I think it's it's something that we want you to to plan for and ask about, because it can save you a lot of time and money and headache in the long run. And I personally learned that this lesson the hard way. So I hope that you can learn from what Cody has shared and my own mistakes and make

better choices. Cody, this was fantastic. Thank you so much for being here and you've given contact information is on the slide. We'll also link to it in the show notes. If people have follow up questions, lots of opportunity to connect with you. I love that.

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Cody Brasseal

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Thank you so much for having me. I really do appreciate the opportunity to be a part of this and and, yeah, thank you.

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Kendra Seymour

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Absolutely. Thank you for everyone listening. If you didn't catch the other episodes, or if you just want to rewatch them, don't forget to hit that like and follow button on YouTube, you can also, and I encourage everyone to do this head on over to [ChangeTheAirFoundation.org](https://www.ChangeTheAirFoundation.org), and sign up for our newsletter, because we send great information like this directly to your inbox, downloads and tips. We're going to have companion articles to this series, things you can print out to help you find HVAC contractors who are going to be the best for your home, anything that we can do to support you and healthy indoor air and a healthy home, that's what we're about. So again, head on over to our website and check out that mini class tab, because they're all there ready to watch. Thank you so much everyone. We'll see you next time.