December Mailbag

Andrew Pace: Welcome to the Non Toxic Environments podcast. My name is Andrew Pace. Every week, my cohost Jay Watts and I will discuss healthier home improvement, ideas and options. Thank you for finding us and please enjoy the show.

Hello folks. Welcome back to Non Toxic Environments. Jay, we were gone for a little bit of a Thanksgiving holiday.

Jay Watts: I think we needed to kind of give thanks, be grateful for all the good things that have come our way. And folks, there are still good things coming our way, even though we're all locked down and in COVID mind, it's going to get better. We know that 2021 is going to be an incredible year for everyone. We're going to have more wisdom. We're going to be kinder to one another. And Andy and I are going to have a lot of things to share with you in the upcoming year. So we're pretty excited about that.

Andy: For sure. And you know, I'm pretty excited too, because here we are the second week in December and we are now just finally looking at our first measurable snow storm coming up this weekend.

Jay: Oh, what are you going to do to get the snow shoes on?

Andy: You know, I might. I actually bought snow shoes a couple of years ago thinking, you know, I live in Wisconsin. I need to embrace the outdoors in the middle of winter.

Jay: I would think so.

Andy: And so far, those haven't embraced the outdoors yet. So I'll get them out this year.

Jay: You got a little ice fishing on your mind. Huh?

Andy: I do some ice fishing. It's lot of fun. It's a tradition here in Wisconsin.

Jay: Okay. Well, I've seen it done. I've never done it. It looks interesting. How about the polar bear splash into the cold water and then jump in the sauna, you doing that too?

Andy: That I do not do. Every year New Year's day on Lake Michigan, you get about a thousand idiots. I mean a thousand people who loved to run into the icy cold water of Lake Michigan. I'm quite sure it's driven mostly by Milwaukee's product, which would be beer.

Jay: Oh yeah.

Andy: Yeah. So, I do not partake in that. To everybody who does that, godspeed, but I'm going to stay away.

Jay: That might be the next cure for the next virus who knows. All right. Let's get onto it here. We thought we'd get into the mailbag. We really appreciative of all the questions that get shot our way. And then we try to answer them as clearly as we can. I'll start us off with this one. This comes from a gentleman named Jerry who actually lives here on the West coast in Ventura, California, and Jerry writes, "we have a crawlspace concrete slab that we would like to

seal to prevent moisture from wicking up under and going into the floor joists, we've had some mold under the house, which we removed, but now we want to eliminate as much as we can an environment that could foster future infestation. Thanks, thanks for your help." So, they've got a crawlspace, my crawlspace is dirt. I can't really crawl and I have to slither on my belly. He didn't say how ho how much space he's got, but I'm figuring there's probably enough room for him to get in there, move around, but it's concrete. They're worried about wicking.

Andy: Sure, sure. This is a big issue all throughout the country. I've been involved in many projects where they have either a full concrete crawlspace or partial concrete, it's nice to have that extra space down there for storage. It makes it easier to work on mechanicals that are underneath the first floor. Adding concrete down there eliminates a lot of the moisture that would normally come up just through the dirt.

Jay: That's what I was thinking too.

Andy: However, if there is moisture still coming up, it usually requires a few different approaches. Of course we want to find out, well, what is the humidity level down there? So we'd always say get yourself a digital hydrometer, place it in the crawl space. Let's get a few weeks worth of readings so we know what we're dealing with. Obviously inspect the space to see if you actually have pooling or puddling water in different locations. This is telling me that the water table in the area is really high.

Jay: I was going to just interject right there. And when they're doing a moisture hydrometer test, would you think that it probably would be more…. I'm thinking seasonally when that would be the best idea in the spring time, if you're an area where you've got snow and you got a melt,

would that be the time to really be inspecting for moisture intrusion? Or is it any time of the year?

Andy: It kind of depends. If this is a problem that he's just bringing up now, that's telling me it might be a wet season where he is. And of course, this is the time that you're going to notice this more often, but ideally you'd like to get as much data as possible. Of course, if you're dealing with such a humidity issue is such a moisture issue, you really don't have time to wait.

Jay: Well, he's in Ventura. So he's on the California coast. He's got a Marine environment.

Andy: Okay. And so here's the thing, if you've got visible water on the slab or dark spots that's telling that you have either an active moisture situation of water coming in into the water table rising. I'll be honest with you, I don't think a coating is your best bet here. I would probably cover the entire concrete slab and the walls, the short walls of the foundation, with a vapor barrier and use something like a 15 mil thick plastic vapor barrier. And you'll have to, at least for the short term, inspect it every once in a while to see if you have moisture building up on the underside of that.

Jay: I was just thinking that.

Andy: This is one of those situations where you may have to go even further and talk to a contractor about maybe putting in a drain tile around the perimeter of the inside of that space to get rid of the moisture. Now, again, we're just kind of speculating what it is, but really all you can do at this point is block the moisture and then see what's happening once you start blocking the moisture.

Jay: Is there any rationale around some kind of a dehumidification down there? Is that a mechanical thing that can be done or something?

Andy: Yeah, so that's really another step, which is if you've got moisture in that space and you really just got to get it out, you can put it in an active ventilation system to actually blow a fan, it really just kind of blows across the surface and invents outside. So that's something to look at. There's a couple of companies out there that actually make equipment specifically for that. And then also inspect the underside of the floor joist, because if this is a moisture problem that's been happening for a while, you really got to see if you're having any mold issues occurring. And if that's the case, then you have to deal with that. Of course, we would recommend the Caliwel product to be applied to all the surfaces to kill off the mold spores and keeping them from reoccurring for the next few years. So it's kind of a multi-pronged approach, but there's no one perfect solution. You really have to use what is required based upon what you see.

Jay: Then that's all good input. Okay. That was for Jerry in Ventura. Jerry, hope you're listening. If you're not maybe someone will pass this on to you. So let's go onto another one here. All the way other on the other side of the country in Sarasota, Florida. This is Elaine. Elaine is writing and saying, "we're getting ready to tile our entryway and the contractor wants to use thin set. Is there a reason to be concerned about this? Are there any alternatives to thin set? Thank you."

Andy: Okay. So when installing tile specifically floor tile, the absolute best approach to install tile is to use a thin set. So we just need to sort of describe what a thin set is. Thin set means, it's a thin set mortar, a thin set mortar is essentially a cement, wet cement that's made without large aggregates. It's a mixture that allows for a little more flexibility once it sets. Now, keep in mind when you're doing floor tiles, and let's say it's a 12 inch by 12 inch floor tile. If you were to use something like an adhesive… and I know in some situations we'll recommend the AFM 3 in 1 Adhesive to be used for some types of tile, specifically wall tiles, smaller wall tiles… But on a floor, an adhesive doesn't have enough body to it to allow for a leveling. So thin set is also what's called a leveling bed. It allows you to set the tile in, and keep in mind that tiles aren't always perfect and the sub floor is not always perfect. So when you trowel out the thin set, it allows the contractor to be able to level the floor tile to even everything out.

Jay: Right. And she didn't mention what kind of subfloor we're looking at- concrete or a plywood or whatever, but I think it's still the same issues whether it's that sub floor or a different sub floor.

Andy: It is. The difference would be the preparation. What type of underlayment you'd use, and that's a show on its own, but there are different materials for different various situations. Now, the one question I always get of course is thin set, is it loaded with chemicals?

Jay: That’s the question I get too.

Andy: So there are two ways you can buy thin set mortar- premixed, which comes in a bucket, open it up and start troweling it out. And then an unmixed dry bag. Now I always recommend

the unmixed dry bag. It's just dry powder. And you have an option with most of these manufacturers, you can either mix it with pure water, or you can mix it with one of their liquid add mixtures, which adds some strength and flexibility and so forth. But it also adds a bit of a chemical load specifically anti-microbials. So for our chemically sensitive clients, I'll always say, stay away from the liquid admixtures, just use pure water. There are a number of great brands on the market. I prefer a brand called Laticrete, that's the one I like to work with. Keep in mind that after the tile is set, then you have to grout in between the tile and grout is also a very similar material to thin set. So you're using very similar materials.

Jay: I guess the thing I wanted to comment there is people are sometimes worried about the off gassing. I think you've addressed that pretty well. And folks, your tiles are pretty good barrier too. So you've got to grout it and then once the grout is in place and cured, then it's sealing the grout. Sealing the grout, not so much to try to control emissions, really sealing grout is really about protecting the grout longterm.

Andy: Yes, yes. Without a doubt.

Jay: Yeah. AFM has a grout sealer, but there are other grout sealers on the market, too.

Andy: AFM Grout Sealer works great. And again, in the situation with grout, I always recommend a dry bag mix. I don't like the premixed materials. I mean, it's easy to use of course. The big selling point of the draw of the pre-mixed is that a lot of these pre-mixed are mixed with either epoxy or polyurethane resins, which makes the grout literally impossible to stain. Which is obviously a selling point for a lot of people. Downside is- whenever I've tested

those materials, they test to have a pretty significant amount of formaldehyde off gassing due to the nature of the ingredients.

Jay: I's a two-edged sword here, and I think you just have to weigh it out and decide how it fits your profile and what you find as the priorities in the installation. Moving on, we have Neil writing to us from Boise, Idaho, and Neil is saying, "my wife and I are empty nesters with a plan to downscale. Both of us have health concerns and want to make sure the smaller home we buy as such that we can live in it without worrying about the toxic products that might have been used in it. Can you give us some basic guidelines and what we should be looking for when we start our research? Appreciate any direction you can share."

Andy: Wow. Open book right there.

Jay: Boy, big open book. That's right up your alley there Mr. Consultant.

Andy: It is. And as I've said before, tiny homes, big problems.

Jay: I've said that before.

Andy: I guess what I mean by that is that you have all the major equipment that you find in a standard normal size home squeezed into this smaller profile and you still have to deal with all of that. I guess the best tip I can give is this the same tips I would give when buying any existing home, be it a regular size or a fun size, I think that you have to look for quality of construction. You've got to look for… what I like is to avoid spray foam insulation. I like to look for homes that incorporate good HVAC systems, that have no signs of any water damage or

visible mold. Just doing your due diligence to make sure that the contractor uses quality materials. Anything is improvable of course, it's difficult to improve the shell however, of a structure. So I like to look for something that's maybe built in the last five or 10 years. Or something that was built back in the 50s or earlier. Anything that's built in between can be loaded with a lot of suspect materials that have written tried over the years and didn't really cut it from a health standpoint.

Jay: I think this is a topic for a little small pamphlet about this. I could see it just like a bullet point pamphlet here, you're getting ready to buy any kind of house. Doesn't have to be a small house, any house. Here's what you want to look at. Here's the short list. This go right down the list and make sure that you can check all these things off. Then once you lay down your deposit, you're going to be able to sleep at night, knowing that you're not moving into something that's going to be a problem for you down the road, which always means more money.

Andy: I've said this before, too. If someone were to ask me, what's the safer way to go buy an existing in remodel or build new? I will always say build new because we can choose each and every material that goes into that home to ensure that it's nothing that will affect your health negatively. That said, I've had three clients in the last six months that have hired me to go through Zillow and Redfin listings with them to see based upon the pictures and the descriptions that the realtors used, what's at least a good starting point for these families.

Jay: How’s that working out?

Andy: It can be done. I'm thinking of one in particular right now, we're actually helping a client remodel a home in Scottsdale, Arizona. She's very chemically sensitive and she's moving there into this house, literally sight unseen.

Jay: Oh boy.

Andy: She flew to Arizona to look at homes because she's just so deathly ill, she had to find something in a drier climate. The one that she found that she was negotiating on turns out, had a bad mold problem after we started doing the testing. Yeah. Lo and behold, her realtor friend found another one, another property that she didn't see and decided to buy that home instead, because everything we saw on the list, it just looked like a far easier approach. We're replacing flooring. We're repainting, we're working on the HVAC system, but folks that can be done. This is just a proof of that.

Jay: That's all good stuff. Like I said, I think this is a subject that is worthy of a lot more discussion. Andy, you could actually make a pamphlet that would be real easy for any consumer to use as a starting point when they're in the discovery phase of looking for a new home.

Andy: Probably not a bad idea, Jay,

Jay: Something you can do over the holidays when you're resting up a little bit.

Andy: There you go.

Jay: That's it for me on the mailbag. Anything on your end?

Andy: No, that's a good solid three questions for this week. We promise folks, we will be back again soon with another episode of the show. We've had a lot of folks reaching out asking we haven't heard you on your podcasts last couple of weeks. What happened? It’s the holidays got in the way and had some coordination issues, but here we are back and we’re just as eager and excited to get back with you again next week with another fantastic episode, Jay, once again, thank you very much.

Jay: Yep. I'll talk to you next week.

Andy: Make sure to go to iTunes, give us a rating and review. We greatly appreciate it. We are still the largest healthy home show on the Apple podcast network. So we greatly appreciate that. We look forward to being back with you again next week. Take care, everybody.

Jay: So long, everyone.