

Working Safely with Ipe

Editor's Rating



Dust and oils from Ipe wood are allergenic and toxic. You need serious personal protective gear if you work with Ipe. Here's more info. May 16, 2008

Question

I've followed the many postings concerning ipe for the last year. Recently I got a great deal on a pallet load of ipe flooring (kiln dried 3/4"). The color is all over the map, but quite attractive nevertheless. I plan on using ipe along edges and in high wear situations, for which its properties are well suited.

My main concern is safety. Ipe dust is both toxic and allergenic. Also ipe splinters rapidly fester. This is well known. Now that I've worked with a significant amount of ipe, I'd like to add a few additional observations...

1. Ipe dust is very, very fine. It gets over and into everything - clothes, body hair, tools. Dust this fine is essentially electrostatically bound to surfaces, so it takes a determined effort to remove it.
2. Ipe dust contains silica, which is partially responsible for its harshness to tools. Very fine dust containing silica is life threatening. Ask any coal miner or, in Minnesota here, iron miner, what happens when you're exposed to silica containing dust on a regular basis.
3. Because the dust is so fine it may not be completely filtered by our dust collection and air filtration systems. (Dr. Gene, any opinions on this one?)

4. Some people may not initially react strongly to ipe. This is bad, because you're still getting the silica laden dust into your lungs. Your body's allergic reactions are nature's ways of telling you there's danger.

So, what to do?

1. Cover your body. Gloves, hair nets, long sleeve shirts, the whole works.
2. Dust collection systems running full bore - never work with ipe without them.
3. Get a powered respirator. Triton makes one for \$150 that combines a hardhat, face shield, ear muffs, and shroud that pulls tight around the shoulders and neck. The air is taken in by a battery powered filter pack worn in the small of the user's back and the filtered air enters the back of the hardhat and gently blows down the user's face. Even on muggy days the visor doesn't fog up. The system is so effective that, when working with aromatic red cedar, I can barely smell it. This is an effective system for working with ipe. (Note: I have no connection whatsoever with Triton. I'm certain that there are other products that will do the same thing.)
4. Shower after working with ipe. Remember that the dust adheres to your clothes. Blowing yourself off with an airgun (even while wearing the powered respirator) will not remove all the ipe dust from your clothing. If you can't shower, at least bring a clean shirt to change into.

Some readers may think this is way over the top. I disagree. I was one of the lucky ones who didn't react strongly to coco-bolo or canary wood or a few other beautiful but dangerous woods. Yes, I wore masks and cleaned the shop. However, slowly my immunity vanished and occupational asthma set in. Thanks to emergency intervention at Mayo Clinic, I survived two status asthmatic attacks. Shortly thereafter, I had to abandon my cabinetmaking

business (13 years as a furniture maker) and return to corporate America.

Now, I'm retired and back woodworking, but thanks to the availability of inexpensive, yet effective, dust collection systems, respirators, etc., I am able to safely work with wood. I just hope this terribly long posting helps someone avoid what I went through.

Forum Responses

(Furniture Making Forum)

From contributor C:

Read your post and got scared. I recently installed a small amount of ipe flooring in my home (600ft²). Took one week, yellow fine dust stuck to everything, and I only used a dust mask, not knowing the hazard of working with this wood. Very irritating to sensitive skin around facial area. How can I find out how much risk I put my body to, and is the wood safe to have in a home? I still need to have it sanded and finished.

From the original questioner:

First, let's put your mind at ease. Because ipe is an irritant, the wood warns you that it's nasty. You experienced typical skin irritation. A good shower, maybe some topical cortisone cream (or other soothing balm), and you should be fine. This stuff isn't like mercury or some carcinogen that once you get into it, terrible things happen 20 years later.

Second, clean up the dust thoroughly and be as well-protected as you can.

Third, as long as there is no more sanding to be done, go ahead and finish your floor. It is the dust that makes ipe nasty. I work with ipe all the time. When I use hand tools, I only use a mask, since nice even shavings come off the tool. Contrary to popular legend, while ipe is hard as hell, it works well

with hand tools. Dulls them quickly, but that's what sharpening stones are for.

Ipe decking and flooring is sold everywhere and, to the best of my knowledge, has resulted in no health issues. Again, the dust is the culprit, except for skin contact by extremely sensitive individuals. In the case of a finished floor, even that scenario is unlikely.

My posting was meant to scare people into taking precautions when machining and finishing ipe; it wasn't intended to discourage people from using ipe. Hope this helps, and enjoy your floor.

From contributor H:

Well, I read this a little too late...I had inquired about gluing up ipe. I did not receive any warning from the company I bought it from... They are the importer and it is the only wood they sell, so it seems like they would maybe mention that. So now I always wear breathing protection, but did not protect my skin... One day one window to make, and one day in the emergency room with blisters, swelling, itching and burning (kind of like you may have gotten a splash of muriatic acid) and now several nights of lost sleep. Please be careful, most medical sites on cancer give this a 3 out of 3 stars for danger.

From the original questioner:

I'm sorry to hear about your severe reaction. My posting was intended to prevent exactly the type of pain and suffering you went through. Shame on your supplier for not having given you a warning! My supplier made a point of mentioning to me that their mill hands have a terrible time with the dust, so I was forewarned and took precautions against skin exposure from day

one.

With that said, I believe you have an unusual degree of sensitivity to ipe. For this reason, I'd do a sensitivity test on any "exotic" wood you work with. This would involve taking a small amount of sawdust from the wood (a pinch will do), put it under a band aid and attach it to your skin for about a half hour (or less). If there is any reddening, don't use that wood. Skin exposure is very difficult to defend against 100%. Again, sorry for the problems you experienced.

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