

Deck Ledger Question

To the Editor:

I just finished reading "Load-Tested Deck Ledger Connections" (3/04) — my reading has fallen behind — and I'm glad you finally came through with the information that had intrigued many of us who read your magazine.

The one thing that this test failed to include is weatherproofing protection of the rim joist. I have repaired many a so-called carpenter's work over the years, and rotted rim joists are common when the lack of flashing allows the weather to get in behind the ledger.

Rubberized membrane on the rim joist usually works best. It's sticky on both sides and seals the bolts/lag screws when they penetrate to create a water resistant barrier. I also use a ledger board flashing cap on top of the ledger to divert water away from the house should it get behind the siding.

It would be helpful to know how the rubber membrane affects the connector shear value due to the separation of the rim board (or plywood) and the ledger board by a thin rubber membrane.

T. Wolf

T. Wolf Home Improvements
Hazlet, N.J.

Thanks for your letter. I discussed your question with author Frank Woeste. The upshot is that the presence of a thin compressible membrane would have negligible effect on the connection.

— The Editor

Why Not Make Changes?

To the Editor:

As a new small business, we've learned a lot from your news, business, and legal articles. For example, the article "Tracking Changes — All of Them" (*Business*, 6/04) brought to my attention the need to document how

a change will affect the timing of a project. The only question I had is why in the world would a GC deny a change order for replacing the tile in the kitchen? We currently install our own tile. If the cabinets are placed on the tile underlayment and the tile runs up to the toe kick, then a tile change becomes minor instead of major surgery.

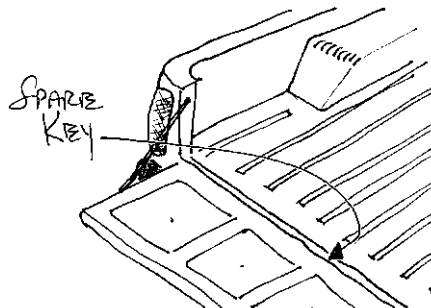
If the customer wanted us to knock the just completed home down and start over, heck, if the check was good, why not?

Chuck Prottengeier
Fennville, Mich.

Duct Tape for Dummies

To the Editor:

I routinely lock my keys in my truck — a dumb move I execute about once a month. Having learned the hard way, I now secure a backup key with duct tape on the bottom of the tail gate. It's not visible, does not



come in contact with loads, will not shake off like magnetic keepers, and, after use, can be "fixed" with the roll of tape I carry in my cab.

Steve Thomas
Dublin, Ohio

Spanish Language Resources

To the Editor:

Congratulations to Jon Vara for the great article, "Success With Spanish-

Speaking Employees" (5/04). I'm a bilingual trainer with Oregon OSHA. I have recently completed training bilingual materials for the residential construction materials (named PESO) and a 30,000 word Occupational Safety Spanish-English / English-Spanish dictionary. All this information is in the public domain and available through the Oregon OSHA web page, www.orosha.org.

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House Traps & Plumbing Code

To the Editor:

Regarding the item "Getting Rid of Vent Gas Smell" (Q&A, 3/04): I have been a plumber for more than 30 years and have pumped septic tanks for the last 25 years. You are really covering up the real problem — the septic tank odor — by putting a trap in the line. And when that customer's septic tank gets worse and starts smelling again, he will never know there is a problem until it is way beyond fixing reasonably and cheaply without total replacement of the septic tank or leachbed.

A septic tank that is working properly does not smell badly. There is very little odor. So the fact that there is odor coming out of this vent would tell a qualified septic tank inspector, that there is something wrong. But you don't get rid of the odor by only treating a symptom of that odor. You have to look at where the odor is coming from. If this customer had a septic odor problem, it's because there is something wrong with the bacterial action in that septic system. I can take any odor in a septic tank and solve the problem. It may take me a while, but I can solve it. Any good septic

man should be able to do that.

If you don't have the correct amount of bacteria in a septic system, you will have terrible odors. The less bacteria you have, the worse the odor will get. Either something is killing the bacteria in this septic system, or it never started when the system was newly installed. A septic tank must have oxygen to feed the bacteria and to keep them working correctly, living and multiplying, and digesting the sewage.

There are two major types of bacteria in a septic system: anaerobic and aerobic. Aerobic bacteria in a regular septic tank work on the crust on the top, mainly from the top side. They are able to do that because of the air coming from that vent in the house! That vent through the roof of the house lets air into the septic system, and stabilizes that septic tank. It keeps the oxygen from becoming stale and releases the carbon dioxide created by the bacteria! The oxygen in the vent keeps it fresh and equalized, not pressurized. That means it stays calm in the septic tank. It also allows the smelly byproducts of the bacterial action to escape from the septic tank.

By installing the inline trap, you take away the air from that vent at the house to the septic tank. So unless you put a new source of air to that septic tank, how in the world does it get oxygen?

As a plumber I have another problem with this proposal: I can't run my eel through most of these 4-inch inline traps. The eel would get stuck, and I would have to downgrade my eel service in order to accommodate the trap. If I have to use a smaller eel, I am not doing the best job for my customer, am I?

In our area, an inline house trap is illegal anyway, but I realize that in your state you may be allowed to do what you did. But in my opinion, you goofed. Mr. Yates is probably a very

good professional plumber, but I believe you have missed the boat on this symptom!

Keith Kirkman
Kirkman's Plumbing and
Eel Service, Inc.
Greenville, Ohio

Dave Yates responds: Septic tanks off-gas as they "digest" the contents, but the tanks are not vented to permit admittance of fresh air or escape of gases generated. By virtue of these facts, they are essentially devoid of free oxygen. It's not uncommon for plumbers and septic technicians to be overcome by the gases when working on septic tanks; quite a few have passed out, fallen in, and died over the years. One that stands out in my memory was a father-son team. The father passed out and fell in as he was leaning forward, looking into the tank. The son died in an attempt to save his father. Both died due to the lack of oxygen working over a tank that had been opened. Add to this the fact that methane gases can be quite flammable, and you can understand why we treat septic tanks with a great deal of respect.

The idea that the house vent supplies air to the tank is incorrect. That would require the laws of physics to be turned upside-down. Both gravity and air convection are working against that notion, which also explains why a trap set with a fresh air vent works so well. Additionally, this claim would require bi-directional passing of gases from the tank and the "incoming" fresh air, which is not likely to happen. The only oxygen the unvented tank receives is that entrained within the wastes and wastewater.

There's no need to run your "eel" through the trap — that's why cleanouts are provided at both the trap and the wye.

In my location, all areas except one require the installation of a trap set when connecting to a municipal system. So far, septic systems have enjoyed a free pass from that requirement. However, I submit

my solution not only solves the tank odor issues within the home, but the trap set also improves the performance and safety of the plumbing system.

Faulty Vault Math

To the Editor:

Regarding the article on cross-vaulted ceilings (6/04): The formula for finding the radius of an arch based on the arch's width and rise was correct in the article, but the radii given did not work out using the given arch dimensions. The correct radii for the side arches and the diagonal arches, respectively, are 8 feet 6 inches and 16 feet 6 inches.

What a well-crafted ceiling!

Thor Matteson, S.E.
Mariposa, Calif.

You're right; sorry about the error.

— The Editor

KEEP 'EM COMING!

Letters must be signed and include the writer's address. *The Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to JLC, 186 Allen Brook Ln., Williston, VT 05495; or e-mail to jlc-editorial@hanleywood.com.