

March 2010 newsletter from Building Diagnostics

Welcome to the March newsletter. Thanks for the continuing feedback. I hope you will keep letting me know that you are reading it.

I'm running a little late with this newsletter this month, there has been a sudden burst business of activity which is a good thing.

I hope you all survived the recent windstorm (no snickering from you off grid people). We were very fortunate in our neighborhood, our power never went out. I did go to see a friend who was having some problems with her generator. All I can say is that people do the stupidest things with generators. If you have any doubts about how to hook it up please call a competent professional. There are lots of ways to do damage with a generator: electrocution, carbon monoxide, fire and probably several others that I'm forgetting. What always impresses me is the creative way people try to combine the problems.

This Month's Topic: Multiples

That's right, there's more than one topic this month. We're going to start out with words.

I was scrounging around for some technical information on the [building science.com](http://building-science.com) website when I came across this interesting tidbit:

<http://www.buildingscience.com/documents/insights/bsi-024-vocabulary/?topic=/doctypes/building-science-insights>. Note: Joe's style can be a bit off-putting but it's

hard to argue that he is wrong in this case. Agreeing on what things are and what they do is half the battle. It's very frustrating to get into an argument and get most of the way through it only to discover that both parties were talking about different things.

Staying on the topic of words for a while; I'd love to eliminate the term "energy audit". If you going to be successful, both for yourself and your customer you need to be doing a lot more than just energy. I have been toying with the phrase "whole building performance assessments", but that doesn't trip easily off the tongue either. Oh well, I'll keep searching, any suggestions are more than welcome.

One of the interesting things I saw at the Better Buildings by Design conference in Burlington

Vermont was a presentation on residential scale co-generation. There was a lot of information to feed the inner building geek. While I personally don't believe that this technology is likely to become widespread soon, I think the potential for heavy load houses is really great. The most likely commercialization of the product will probably be in backup and peak shaving applications.

One of the main benefits from attending a show like Better Buildings by Design is the opportunity to stretch your thinking. I can't say that I came away from the show with any great new technical insights or blockbuster products, but there were a few things that will certainly make their way into how I think about putting systems into buildings.

Marc Rosenbaum had a very interesting presentation about retrofitting a classroom in his local elementary school. He, and some local volunteers selected a corner classroom, replaced the windows, replaced the rotted sliding and added several inches of rigid insulation, installed an energy recovery ventilator and a Mitsubishi low-temperature heat pump. The interesting point was putting a separate ERV in each classroom. Typically a building like this would have a large central unit serving the entire wing or block of classrooms. However it can be just as economical to install a single unit per room. Additional benefits include classroom by classroom control and the smaller units are easier to maintain.

All the presentations for the conference are available online at:

http://www.encyvermont.com/pages/Business/BuildingEfficiently/BetterBuildingByDesignConferen/2010_Conference_Presentations/

just to add a couple items that I thought were highlights: Skip Haydn's presentation on heating systems for low-energy houses, John Straube talking about just about anything and Marc Rosenbaum again on passive houses.

The trade show portion of the event can be summed up by simply saying LED. There wasn't a lot of new stuff there this year accepted the lighting tables which were all LED all the time.

One last note on the show, the vibe this year was very different. In years past there seem to be an awful lot of opportunities for interaction with other attendees. This year starting conversations was difficult, at the end of each session the cell phones came out and everybody retreated into their own world. I'm not sure what to attribute that to, but the level of fun was definitely lower this year.

Energy tips:

Rechargeable batteries are the way to go with all the portable electronic gear that we have. They last a lot longer than alkaline cells in the runtime costs are far lower. Occasionally they do misbehave, they won't hold a charge or they won't even accept the charge. I thought that

was just the nature of the beast until I discovered that you can buy chargers that have a conditioning cycle. You put your misbehaving batteries into the charger, activate the conditioning cycle and leave them overnight. I don't know exactly what it does but it has rejuvenated about a dozen AA cells for me.

I found mine on Amazon for about \$25 but I'm sure there are others out there. I'm pretty sure that it has paid for itself just with this first round of use.

One other battery tip, carry your AA cells in elastic sleeves meant for carrying bullets. They hold securely, keep the batteries from touching and are flexible so you can tuck the batteries in around other equipment.

Blatantly Commercial Content:

I do have to justify the time spent on this effort, so I am charging myself an exorbitant fee to sponsor this newsletter. I get one ad per newsletter and free coffee refills in the kitchen.

Business update: I continue to do a mix of residential and commercial energy consulting work; I'm looking for more of both. Please visit my website, <http://www.buildingdiagnosticsnh.com/> for information on my capabilities and background.

If you have projects that you would like a little help with please call me. I enjoy collaborative efforts and am always looking for additional opportunities.

Thinking Update:

With the increased interest in energy efficiency we have a lot of new people entering the field. Many of these people are entering the field with one week of BPI training and good intentions (I hope). What we don't have is any type of mentoring. I've had several inquiries from people looking for experience and in some cases offering to work for free. The problem is that this leaves a lot of liability issues unaccounted for.

I would love to be offering some mentoring to some of these people. But I'd like to know if anyone has any experience or knowledge with programs that would allow these people to work under supervision but provides some liability buffer. I think that this could go further in promoting and protecting this business of licensing. If anyone has any thoughts I'd love to discuss them.

Closing thoughts:

As mentioned above, I need feedback for this little venture to succeed. I would like to include notices for events that relate to energy, the environment and community building, so if you have any announcements please send them in to newsletters@buildingdiagnosticsnh.com. I also welcome rebuttals and amplifications for anything I write.

Please forward this to anyone who you think would like it, if you don't like it use the email address above to unsubscribe.

Thank you, I'll see you next month.