
YOUR Church Project

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Newsletter

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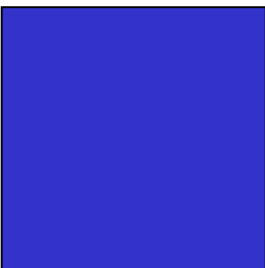
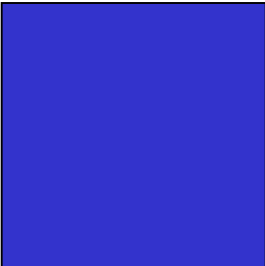
Quick Tip of the Month: A Handy Way to Resolve Operational Dilemmas

I have found myself on more than one occasion faced with a dilemma, and I'll use Heating, Ventilating, and Air Conditioning (HVAC) systems as an explanatory example; it's composed of two major components – the equipment and the controls.

The source of the dilemma is that each component is serviced by a different contractor. One for the equipment and one for the controls.

More times than I care to remember I have been confronted with each of them claiming that the other is the individual responsible for resolving an operational problem (air handler is off, pump is stopped, alarm didn't sound, etc., ad infinitum).

When this type of seeming impasse occurs, I require that both of them meet with me on site to resolve the problem. And they don't get to leave until it's fixed or resolved. Period. Same thing with Architect vs. Contractor, Contractor s. sub-contractor, etc. Works every time!





Feature Article of the Month: Making Sure Your Installed Equipment is Designed to be Maintained – It Won't Be Unless You Do This

“We do not have unlimited capital. If we cannot make the new library sustainable for future generations we are providing a maintenance timebomb.”

John Alden

I guess the best way to tell you about this strategy is to tell you how I discovered it – and that will require a little story.

A number of years ago (fifteen or so, just for reference), the place where I worked decided it was time to update/renovate the HVAC system. And it certainly was time – the 100,000 square foot building was forty years old, and the equipment was original.

So, I got to oversee the development of the engineering plans for the replacement all of the equipment, and the associated piping which also had to be replaced. I'm talking the whole nine yards here – cooling towers, chillers, boilers, pumps, and eight inch chilled and hot water piping from the basement to the roof (four floors), and back.

I also oversaw the bidding, the bid award, and the installation. It took a little over a million and a half dollars in sum total, and the better part of a year for installation (the building had to remain operational throughout!).

When the work was finished, everything worked to perfection.

For a while.

When we finally managed to hire a qualified HVAC maintenance contractor, and it took three tries to do that (which will be the topic of a future newsletter), the contractor informed us that the system was not designed to be maintained. To make it so would wind up costing nearly another half million dollars for retrofits to allow for required maintenance procedures to be performed.

It was not good news. The news was mitigated by the fact that the work could be done on an “as needed” basis; as a result it could be spread over three budget years.

But it was still not good news.

As I studied how I had gotten myself into this mess, I discovered the crux of the problem.

Most mechanical engineers are pretty good at what they do. They've been to college, gotten their degree, and passed a licensing exam. They know really well how to assemble a system composed of pieces of equipment from different manufacturers so that it works to correctly perform the intended function pretty nearly perfectly. The problem is that they've had neither training nor experience in having to maintain these complex systems. Their experience is limited, for the most part, to working with "new stuff". Not their fault, just the way things are.

But you don't have to live with that outcome; here's how to avoid it.

First, when you're negotiating a contract with your architect, make sure to inform him or her that you'll need a comprehensive listing of all of the pieces of HVAC and associated equipment at the end of the preliminary design stage, to include the manufacturer's recommendations for preventative maintenance for each piece. Make them aware also that you're going to have your HVAC contractor review the construction documents at the end of the design development phase.

Inform them further that if the contractor has any issues regarding the ability to adequately maintain the equipment after reviewing the documents, you expect the mechanical engineer to modify the documents in response without any additional charge. Make absolutely sure that language to this effect is included in your contract with your architect.

I can assure you that you'll have the full attention of your architect's mechanical engineer from that point forward. They might even try to learn a little about maintaining the equipment themselves!

Then, if you already have an HVAC contractor servicing your existing equipment, that's great. If not, since you'll be needing one anyway, use the list of equipment from the preliminary phase to issue an invitation for bids to at least three reputable commercial HVAC service contractors. The low bidder will be the one you have review the documents at the end of design development (a by-product of this, which you'll see shortly, is really sweet!).

Once the design development documents are in your hands for review, and ask for two sets by the way, have your HVAC contractor perform a comprehensive review of the mechanical portion of the design. Please note – that requirement for a comprehensive review should be part of his contract. Once the mechanical review is completed, and you have comments in hand, return them to your architect.

If your contractor had any comments of substance at all, they will now be included in the final documents at no additional cost to you.

And, (this is the good part) once your church project is complete, and your HVAC contractor is routinely working to maintain your equipment, you are covered. If the contractor somehow finds a situation where proper maintenance cannot be performed because something needed is not

there, or in the wrong place, or whatever, it has now become the contractor's problem – not yours.

I'm sure this can work for you as well as it has for me. I know "I'll never leave home without it" again!

Next Month: Collaborative Problem Solving - Three Heads Can Be Better Than One, Sort Of

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