



# Maintaining New Facilities?

By Matt Adams, P.E.

The cost to maintain a new facility has been argued between the business office and the facilities department for many years. The cliché is that new facilities don't have any breakdowns and therefore require less maintenance dollars, i.e., staff, contracts, and materials. From the plant perspective, few accept this and try to make the opposite point. However, the facts and correct answer, like those associated with so many other issues in our business, are more complicated

and sometimes hidden. What is really going on within the new facility during the first few years of operation is much more dynamic than the casual observation that there seems to be fewer unplanned failures. If you accept the cliché, then you might also accept the premise that healthy living is only required of older, sick people and that younger people don't need to bother. We all know that there are meaningful consequences for unhealthy life choices before we become aged.

Most institutions are grappling with this issue on a building-by-building basis. As a new building is added to the portfolio, the question of budget increase associated with additional maintenance load is negotiated between the business office and facilities. However, there are many institutions, both in higher education as well as K-12, where the question is given an order of magnitude more weight. This can come as a result of rapid expansion of the portfolio from new master plan fulfillment or in the case of K-12, "adequacy" initiatives or rapid population growth. In these scenarios, we ask the question of whether our maintenance budgets should increase by 10 percent if we add 10 percent or more square footage, equal to several or more new buildings – not just one. There are a number of important issues to consider, the least of them being the expected amount of unplanned maintenance for new facilities.

The facilities we are adding to our institutional portfolios are more complex than ever. The systems have new technology and require new equipment and skills for operation and maintenance. Even the contractors are struggling with these new systems, and this can result in improper installation and construction.

In all cases, commissioning is an appropriate step in the construction process. Commissioning at the end of the construction schedule is relatively brief and intense, providing considerable return on investment. In the past, there is a gap from this point for several or more years until maintenance resources are allocated or unplanned failures demand them. However, why not continue the commissioning process with a less intense, long-term approach? In other words, assemble a team of highly skilled trades to continue to test, adjust, and properly configure the operational parameters of the new systems.

Providing Solutions That Diagnose, Upgrade & Restore Thermally Degraded Underground Heat Distribution Systems

**ConduFill®**

Removable Insulation Covers

We provide reliable solutions that will:

- Restore thermal efficiency
- Prolong the life of piping systems
- Minimize heat losses and reduce heat costs
- Eliminate manhole vapor
- Prevent damage to grounds
- Detect hidden problems within piping systems

**Thermal Science Technologies**

To learn more about our products & services, call us at  
**Phone: 1-877-CONDUFILL**  
 or visit our website at  
[www.thermalsciencetech.com](http://www.thermalsciencetech.com)

**SPECIALIZING IN**

**COLLEGE/UNIVERSITY**

**CUSTODIAL SERVICES**



*WFF "Circle Of Quality"*

**Our singular goal is to partner with Physical Plant Directors to provide a clean & safe environment for your customers and ours...the student.**

**Professional Management**

**WFF** Facility Services' management philosophy emphasizes a strong team approach between on-site management, regional management and corporate staff.

**Trained Associates**

**WFF** believes quality starts with professionally trained associates. They are the frontline of our company. The individuals our customers see everyday are our associates.

**Advanced Technology**

As a provider of custodial services to college and university campuses for over 25 years, **WFF** recognizes the importance of advanced technology in all aspects of our business.

**Quality Assurance**

**WFF's** Quality Assurance Program requires commitment to excellence by every member of our custodial staff. Our Management Team reinforces this standard of excellence each and every day!

*For more information please call: 1-800-852-2388*



**WFF Facility Services**

11 South Jefferson Ave. Saint Louis, MO 63103

[www.wffservices.com](http://www.wffservices.com)

Phil Resch, the assistant director of student housing at Stanford University, embraces the concept of “extended commissioning.” He says, “There are many factors involved here—especially the fact that the buildings are alive and become even more dynamic once they become loaded/occupied, and especially student

housing facilities that are used 24/7. All new buildings are not static and all work is not covered by warranty.”

Anecdotal evidence from most of our peers suggests that even with normal commissioning, the plant department must continue to fix improper installation or reconfigure systems after the contrac-

**THE TRANSFER OF KNOWLEDGE CONTINUES TO BE AN ISSUE FOR NEW FACILITY HANDOVERS. THE BRIEF TRAINING PROVIDED BY THE CONTRACTORS IS NEVER ADEQUATE AND IS OFTEN LIKE TRYING TO TAKE A SIP FROM A FIRE HYDRANT.**



There is no reason to replace structurally sound tile just because it's filthy and you can no longer clean it. With the SaniGLAZE restorative bonding technology, older tile that seems destined to the land fill can be transformed to beautiful new tile in just a few hours with no debris or construction headaches. And best of all, it will be very easy to maintain.

**Go Green** and end ugly tile & grout with the power of the **SaniGLAZE** process.

**SaniGLAZE**  
NEW TILE & GROUT WITHOUT REPLACEMENT

[www.saniglaze.com](http://www.saniglaze.com)

1.866.873.6936



tors have left. They are actually performing a sort of “long-term” commissioning in an unplanned manner. Why not turn this reality on its head and proactively implement a long-term commissioning strategy for all new facilities? This could provide meaningful returns for up to the first five years of the life of new facilities.

The transfer of knowledge continues to be an issue for new facility handovers. The brief training provided by the contractors is never adequate and is often like trying to take a sip from a fire hydrant.

In addition to implementing long-term commissioning of new facilities, Samer Maamari, the vice president of facilities at the American University of Beirut, plans to assemble an “A-Team” of highly skilled trades and facility engineering professionals for the purpose of training the trainers. This team will immediately get immersed in all aspects of the new system technologies and become experts. By selecting the most talented staff for this task, the learning process is most robust and beneficial to the overall plant department. As more facilities and their associated new technologies are added to campus, this “A-Team” will be prepared to train subsequent teams as well as the existing plant staff. In fact, they will become technical experts offering continuous training and technical support to the remainder of the department.

In contrast, waiting five years to dedicated new staff to the same facilities

will not allow for proper training in a practiced meaningful way. Beyond the obvious train-the-trainer benefits of this strategy, external contractor costs are also avoided over time as little or none of the new high-tech maintenance work must be contracted due to lack of in-house knowledge.

From a larger perspective, early and aggressive maintenance application to new facilities is one the best and most transparent methods of turning the corner on reactive maintenance. Under the old scenario, new buildings are literally allowed to age in an accelerated fashion as a result of little or no proactive planned maintenance. Resources are applied once failures demand them. Worse yet, they are often pulled from the preexisting trade labor pool that is in full reactive mode, strapped with the older buildings in portfolio. This scenario only serves to homogenize the

## FROM A LARGER PERSPECTIVE, EARLY AND AGGRESSIVE MAINTENANCE APPLICATION TO NEW FACILITIES IS ONE THE BEST AND MOST TRANSPARENT METHODS OF TURNING THE CORNER ON REACTIVE MAINTENANCE.

performance of the buildings by reacting (repairing) to them all in the same manner.

Well-performing buildings are punished with little attention until they, too, demand resources for unplanned failures. A better strategy is to dramatically alter the deployment of maintenance resources to the new zone or group of "A" buildings on campus, and make them an example of thoughtful facility stewardship. Prove to the business office that dedicated maintenance resources—when properly deployed and given new, better standards

of care based on commonly accepted best practices—can positively impact departmental performance.

Prove the concept we all talk about but rarely demonstrate on our campuses. Use the opportunity of new facilities as a fresh start for better practices resulting in more productive, highly trained staff working on more finely tuned buildings. 💰

.....  
Matt Adams is president of FM<sup>2</sup>, Atlanta, GA. He can be reached at [matt@adamsfm2.com](mailto:matt@adamsfm2.com).

# TAKE A BITE OUT OF THE PLACES THAT BED BUGS HIDE



Bed Bugs  
Love to Hide in  
Mattress Seams  
(a.k.a. the "tape edge").



Our Residence Hall Mattresses featuring the inverted lock stitch seam design remove a a hiding place for those pesky bed bugs

One extra benefit of this design is that a potential failure point is also removed mattress.



Our Enhanced Style B™ Mattress made with SOFlux OX-V® Ticking and INTEGRITY30® Fire Barrier removes the taped edge seam.

## UNIVERSITY SLEEP PRODUCTS, INC.

Leaders in Innovative Mattress Technology

Phone: 800-548-2072

Fax: 800-548-2071

[www.universitiesleep.com](http://www.universitiesleep.com)



Visit our website to learn more about how our mattress offerings can be an important part of your purchasing strategy.