

## Create Your Own Army of Building Observers

As the seasons change, it is good time to inspect the exterior facades of your building. Seasonal reviews allow you to catch small maintenance items *before* they become big repair bills. Time is short, you are managing more buildings today than in the past, and you don't think you have time to review all your facilities four times a year. Try implementing a small army of building observers already at your disposal. Start with some minor training of your GMs and managers.

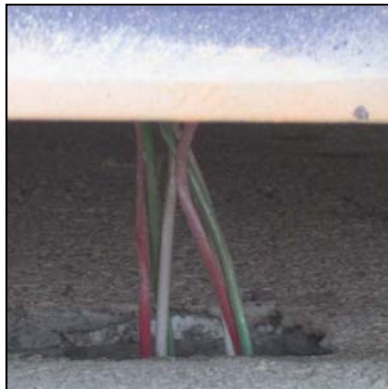
### Training and a Manual

Create a quick training program complete with a manual. In the manual show illustrations of what they are looking for. Worst case is you are creating a quick reference guide for yourself and your facilities team. Your manual should show photos and illustrations of failing sealants, of both good and bad painting, and anything you view as need-to-know on your building. Assign a scale for your army to rate the severity of the issues they find. By giving them a scale to have them rate what they are seeing, based on the photo examples you are providing, you get a sense of the relative severity of the issue. This in no way should replace your own building inspection, but it does give a few sets of extra eyes on the facility. Your training program could be as quick as having your manager complete the first inspection with you as you walk them through the new manual and point out what to look for and how to log any issues.

Their examination should also be carried out after any major weather event. Strong winds can dislodge previously secured signs, flashing, and menu boards.

You never want to find out about these safety issues when property is damaged or, forbid, a team member or customer is injured.

In your Facility Maintenance Manual there should also be a section to log any anomalies. I was visiting a facility to do an onsite evaluation



of some water intrusion issues that were quite elusive and had over the course of a year run up a tab of over ten thousand dollars to stop. During any investigation I always try to meet with the store manager for a few minutes and ask, "Where do you see wet spots, mold, peeling wall paper, wet floors or ceiling tiles after a rain?" I ask because almost every manager, in an effort to keep the store clean, removes any and all evidence of a water leak. As we walk and talk, I hear, "We get mold here in this corner within a week of a good rain." As I look there is no sign of water. *Why?* They cleaned it off. In this case, the store manager showed me three spots that were not in the description given to me by the FM. One place of interest was in the manager's office. We walked in to her office and she showed me an umbrella she kept next to her desk. She proceeded to explain that when it rains water drips on her PC, so she opens the umbrella and places it over her PC. When I asked if she had reported it she said probably not because she had bigger issues to be concerned with and the umbrella was working. Now had there been a maintenance log for the building, these other unknown items may have been reported. By the way, the cause of the water intrusion was an unbalanced exhaust fan on the roof. It was improperly set on a block of wood that, due to the vibrations of the unbalanced fan motor, had worn a hole through the roofing membrane.

The other 'unknown issues,' like the PC umbrella, actually



allowed us to connect the dots and discover the water intrusion cause.

### What to Include

So you and the facility team decided to create a Maintenance Manual. What items do you include?

I would suggest starting at the bottom with the base of the wall and work our way up to the roof line. I say up to the roof line since most companies do not want untrained team members on ladders or on the roof peering over the edge.

### Start at the Base Wall Joint

A large percentage of facilities have a base wall sealant joint. This is typically subject to lots of seasonal movement. In the winter it can be compressed due to frost heaving. In the warm, dry summer months it stretches and can cause failure. This is a critical junction, given most buildings today sit right on top of the foundation with little to no sill plate or curb. Depending on the grading, the height of the sidewalk can be right in line with the top of the foundation, letting in the water or pests if this joint fails. By watching this junction seasonally, you can see failures and reseal if necessary.

### Window Sealants

Next, the window perimeter sealants. These sealants are the perimeter sealants of the window as it attaches to wall cladding. This sealant should be completely sealed with no voids, cracks or splits. As with our base sealant, it can show signs of failure at different times of the year. In the summer, a dark bronze window frame expands, possibly hiding any defects. However, in the winter while the window does not contract, it also won't expand as much, allowing you to see any needed repair areas.

This is also a good time to look for any cracking in the wall cladding, particularly if your cladding is thin set brick, cultured stone, stucco or EIFS (aka Dryvit). Water into any one of these claddings can quickly lead to larger repair bills.

Related to the window sealants are the **door perimeter sealants** and the area around the doors. These areas are subject to damage from other external sources, like delivery handcars, snow removal, and high winds catching the doors and the door handles damaging the wall surface.

### Building Penetrations

The area most overlooked for sealant evaluation is perimeter sealant around building penetrations other than windows and doors. This includes signs, gas lines, power and data lines, water hose bibs, exterior lighting packs and security cameras to name just a few. These items are often replaced and serviced by outside vendors and need to be monitored.

### Wall Cladding

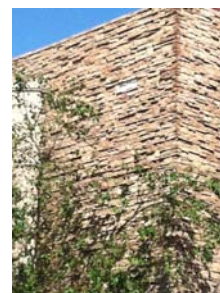
One of the most over looked areas is the most visible portion of the facility: the wall cladding. Each wall cladding has certain items to look at.

**Wood and cement siding** are subject to water intrusion and damage if the



terminations are not kept sealed and painted. This includes all batten board terminations. Any peeling paint should be a sign that a full paint job is just around the corner. We repair several properties every year that have significant damage from improper maintenance of the wood or cement siding.

**Stucco and EIFS**, while considered low maintenance, really need to be visually inspected for signs of cracking, peeling coatings, impact damage, and staining. Most of these systems are single barrier systems and are heavily reliant on sealants. Even the hybrid systems can allow water in and cause long term damage, so sealants need to be monitored on a seasonal basis. Any cracking, impact damage, and peeling coating should be addressed sooner versus later. In areas of temperatures below 32 degrees in the winter, water can freeze in the damaged area and cause a small area to quickly grow to a large area.



Thin set brick and cultured stone are similar to the stucco and EIFS systems mentioned above. Any water entry can cause freezing and cause the cladding to spall off the

building.

### **Masonry**

Finally – masonry, while this category is large and can include CMU, split-faced block and brick. Building trends and code changes over the past few years have allowed masonry building practices known as single width masonry walls. This type of construction is wreaking havoc across the country and needs to be closely monitored. Real world water testing simulating a one inch per hour rain has this type of construction allowing water entry into the building envelope in under fifteen minutes. Keeping this type of wall construction sealed with a **masonry sealer** is paramount. This type of sealer should be applied every twenty-four months for continued protection. For conventional masonry and single width masonry construction, keeping the walls tuck pointed, sealed, and cleaned are your only real concerns. **Tuck pointing** should be done once a crack is noticed or missing mortar is observed.

### **No Umbrella For Your PC**

Once you have your manual compiled and your training complete you can deploy your new army of building observers. It will still be up to you to review the manual, log, and other critical details that pertain to your facilities, but now you will have a map of areas to look at. Just maybe, if all goes well, you'll also have a heads up on the potential of catching a small maintenance item before it becomes a costly repair. And you won't need an umbrella for your PC.