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IT TAKES A VILLAGE

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Implementing a small army of building observers can help inspect exterior facades

The changing of the seasons is always a 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.

But time is short, and you are managing more buildings today than in the past. You may not have time to review all your facilities four times a year. That's why you should consider implementing a small army of building observers.

THE TOOLS FOR THE JOB

Gather your general managers and managers and create a training program and manual. Include illustrations of each lesson in the manual. For example, show photos and illustrations of failing sealants, good and bad painting, and anything that is deemed need-to-know when it comes to building maintenance.

Using the photos that reflect proper maintenance, create a rating system for your army to use when comparing and rating the severity of the issues that are found. Of course this process should not replace your own building inspection, but it helps by putting extra eyes on your facilities.

A good exercise is for a manager to complete an initial assessment, with staff members observing the process. The manager can walk the staff members through the manual and point out what to look for and how to log any issues.

Keep in mind that examination should also be carried out after any major weather event. Strong winds can dislodge signs, flashing and menu boards. Don't wait for injuries to happen in order to become aware of these issues.

Consider a recent onsite evaluation in which a restaurant had water intrusion issues that were quite elusive. Over the course of a year, the problem cost the facility more than $10,000. In any investigation, speak with the store manager. In this case, the store manager was asked, "Where do you see wet spots, mold, peeling wall paper, wet floors or ceiling tiles after a rain?" One place of interest was in the manager's office. The manager informed the investigator that when it rains, water drips onto the PC, requiring an umbrella to protect the equipment. This fact was not reported or logged, which meant the facility manager was not aware of this issue.

It was later determined the cause of the water intrusion was an unbalanced exhaust fan on the roof. The fan was improperly set on a block of wood and, due to the vibrations of the unbalanced fan motor, had worn a hole through the roofing membrane. It was the umbrella story that allowed the investigator to connect the dots and finally solve the problem.

GETTING STARTED

To begin your manual, start at the bottom—at the base of the wall— and work your way up to the roof line.

1. Base Wall Joint

A large percentage of facilities have a base wall sealant joint. This is typically subject to seasonal movement. In the winter, it can compress due to frost heaving. It stretches in the warm, dry summer months.

This is a critical junction, given the fact that most modern buildings 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 in line with the top of the foundation, letting in water or pests if a failure occurs. By watching this junction seasonally, you can spot failures and reseal if necessary.

2. Window Sealants
These sealants attach to wall cladding and should be completely sealed with no voids, cracks or splits. As with the base sealant, it can show signs of failure at different times of the year. In the summer, dark bronze window frames expand, possibly hiding defects. But in the winter, the window does not expand or contract, allowing defects to show.

Look for any cracking in the wall cladding, particularly if the cladding is thin-set brick, cultured stone, stucco or EIFS. Water that seeps into any of these claddings can quickly lead to larger repair bills.

Also check the door perimeter sealants and the area around the doors. These are subject to damage from other external sources, such as delivery handcarts, snow removal and high winds.

3. Building Penetrations
The building perimeter sealant is the area most often overlooked for sealant evaluation. This includes signs, gas lines, power and data lines, water hose bibs, exterior lighting packs and security cameras. These items are often replaced and serviced by outside venders and need to be monitored.

4. Wall Cladding
One of the most overlooked areas is the most visible portion of the facility: the wall cladding.

Wood and cement siding are subject to water intrusion and damage if the terminations are not 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.

While considered low maintenance, stucco and EIFS 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 intrusion and cause long-term damage, so monitor the sealants on a seasonal basis. Any cracking, impact damage and peeling coating should be addressed sooner rather than later. In areas with winter temperatures below 32 degrees, water can freeze, turning a small problem area into costly repair bill.

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.

5. Masonry
This large category can include CMU, splitfaced block and brick. Building trends and code changes over the past few years have allowed masonry building practices to include single-width masonry walls. This type of construction is wreaking havoc across the country and needs to be closely monitored. Real-world water tests that simulate a 1-inch per hour rain have shown this type of construction allows water to enter the building envelope in under 15 minutes.

Sealing this type of wall construction with a masonry sealer every 24 months is paramount. For conventional masonry and single-width masonry construction, keep the walls tuck pointed, sealed and cleaned. Tuck pointing should be done once a crack or missing

NO UMBRELLA FOR YOUR PC

Once the manual is compiled and the training is complete, deploy your new army of building observers.

It will still be up to the manager to review the manual, logs and other critical details that pertain to the facilities, but having a team catch small maintenance items before they become costly repair bills will help your bottom line.

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