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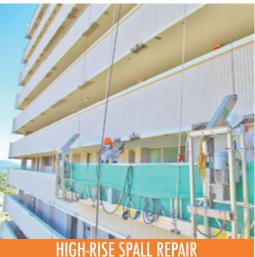


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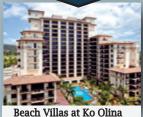




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MANAGERS' TRAINING AND APPRECIATION LUNCHEON

awaiian Properties hosted a Managers' Training and Appreciation Luncheon at Koʻolani AOAO. Iwalani Brown from Sixty Parkside, said, "I really enjoyed the luncheon. This intimate group of beautiful people made me feel very welcomed. The emcee and guest speakers were not only informative but funny as well. Much appreciation to the staff of Hawaiian Properties for their generous gifts and for hosting this wonderful and successful event."





"Knowledge Will Bring You The Opportunity To Make A Difference" - Claire Fagin

ANNUAL SEMINAR FOR BOARD MEMBERS

awaiian Properties also held a board training seminar for its board members at Ala Moana Hotel. Gail Honda, President of Punahou Tower, said, "The venue was nice and easy to get to and park in, the food was good, the talks were interesting, and I very much enjoyed meeting other board members. It was interesting hearing all the problems AOAOs can face. Good session overall!" Chad Okumura, Vice President of Country Club Village 6, stated, "Thank you very much for hosting this event today. I really learned a lot and really appreciate that you put on such an event. The event really exceeded my expectations!"





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Founded by Trade Publishing Company in April 1983, Hawaiian Building Management is a statewide trade magazine serving Hawaii's commercial, industrial, and residential facility management industries. Materials within this publication are not to be construed as professional advice; Trade Publishing disclaims any and all responsibility/liability for health or financial damages arising from its content.

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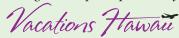








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March Madness and Ladder Safety



You may have heard me say this as a BMH columnist, and you'll likely hear me say it again now that I've become editor: Few professions impact as many human lives on a daily basis as do building managers. Whether it's a residential or a commercial property, people are spending a significant amount of time there, and building/property managers play an outsized role in establishing and maintaining quality of life.

No pressure, right?

So our foremost goal at BMH is making your job easier. That probably explains why contributions from local experts are such a popular feature. In this issue, we ask window and door experts to talk about keeping the elements outside. As much as most of us love the great Hawaiian outdoors, for the most part we like to keep it outdoors. But we also learn in this issue how to open our homes to nature in a controllable way with bigger doors and windows.

Contributors also offer tips for air-conditioning issues, and tailoring a system for each building and even each room, as well as preventing water damage from AC systems.

In this issue, BMH launches a new feature, conversations with the presidents of community and homeowners associations. As different as each association is, there are plenty of similarities. I'm guessing David Putnam's look at a classic

repair-or-replace debate in Hawaii Kai will resonate with many.

BTW, how clean are your solar panels? Dave Dondoneau shows how you're giving away energy if your panels are soiled in some way, even just one little bird dropping.

It's March Madness in the college basketball world and National Ladder Safety Month in the ladder world. The convergence of which we mention only because Werner is the official NCAA sponsor of all those cutting-down-the-nets rituals. And because Brandon Bosworth offers tips to avoid joining the 300 or so people who die every year in ladder-related accidents.

And for our cover story, I had the pleasure of sitting down with new BOMA president Sandra Bollozos-Fraticelli. She was a trouper — knowing we were on deadline, she came to the interview despite coming down with nasty little cold. You'd never know it from her photos or interview. BOMA is in good hands, on this day well wiped with Purelle.

Mahalo,

Don Chapman

Editor

Building Mamagement Hawaii

Have a building management story you'd like to share.

Please contact me at don@tradepublishing.com.



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- The Consulate
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- Hokua at 1288 Ala Moana
- Kahala Towers
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- 2055 Nu'Uanu
- One Waterfront
- Parkland Gardens
- Pii'koi Villas
- The Pleasanton
- 999 Wilder



New BOMA President Rules Hawaii-style

Sandra Bollozos-Fraticelli carries association's agenda to legislators, woos new members

BY DON CHAPMAN

andra Bollozos-Fraticelli wasn't around 46 years ago when the Building Owners and Managers Association first took root in Hawaii, but she's heard stories—and they sound fun.

"At that time, basically, it was a nice social group," the new president of BOMA Hawaii says with a knowing smile that practically says "Cheers!" "It really was for networking when it first formed, to get to know the other building managers and owners."

The organization has grown and evolved over the years, and Bollozos-Fraticelli wants to continue that. "It started with networking, and just grew from there," she says. "We expanded into education, then we got into advocacy, and then we got into scholarships for people who are interested in building management."

There is a hint or irony here, because earlier Bollozos-Fraticelli commented that few people in property management made it a career goal, including herself.

That was in San Francisco, where she'd gone for school from Cebu in the Philippines.

"I was an international business major at San Francisco State," she says, "and when I was going through college I was working for a real estate investment trust company, and I just fell into this after I graduated. There was an opening in the property management division, and that's just the way we progressed."

By the end of her stay in San Francisco, she was managing 425 Market

Street in the financial district, a million-square-foot, 50-story building with just 11 tenants.

"I had one tenant, a law office, that had 11 floors," she says. "I've been with BOMA Hawaii since 2007."

What brought her to the islands?

"I really want to get to know our legislators, and get more involved with laws that might affect our industry."

"I married a guy from Kailua," she says, "Carl Fraticelli."

If the name sounds familiar, he's an assistant coach for the University of Hawaii baseball team. In California he was head coach of two prominent junior college programs and served as a scout for the Oakland A's. It's a good match for a woman who during her lunch breaks often walked a few blocks to AT&T Park to catch a few innings of a Giants game.

Her first job in Honolulu was managing the twin-tower Pacific Guardian Center, and since 2013 she's been at Alii

Place, a 337,000-square-foot tower that became LEED certified in 2014.

"We have 10 or 11 tenants, pretty high-profile tenants," she says. "HART is here, three full floors and one suite on the ground floor where they do all their town hall meetings. The city Prosecutors Office occupies the ninth and 10th floors. And then the Police Commission is also on the ground floor."

Looking for prime space downtown?

"We have three floors that are vacant," she says.

One thing she particularly likes about building management Hawaii-style is that, "even if we are competitors, we're still friends and we share things. That is very different from the Mainland—it's very competitive, they want to hold on to information. Here, I can go to another building manager and ask, 'Do you know a florist or know someone who does this kind of work,' and they're happy to do that for me, and I'm happy to help them."

Sustainability is one of her interests in the next year: "I worked on trash recycling with BOMA San Francisco — we were in the lead on that."



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She also counts education and advocacy among her interests: "We want to educate managers—if you want to be a Real Property Administrator, this is what you need to do and know. . . . We have a continuing ed partnership to gain certification. It's eight or 10 classes, but we can show them a path. And we have to take care of millennials, so I'd like to increase scholarships."

Bollozos-Fraticelli sat down with Building Management Hawaii in her office overlooking the state Capitol on the day before she and a delegation of BOMA members would visit for Opening Day of the Legislature.

"I really want to get to know our legislators, and get more involved with laws that might affect our industry," she says.

Issues include (again) fire sprinkler upgrades. "We would like to do upgrades, but some owners just don't have the funds available to retrofit, so we'd like to suggest an extended depreciation schedule," she says. "For older buildings that have to retrofit, it really does become a burden because the owners are very willing to do it, but there's the feasibility of doing it while the building is occupied as well as the cost," she says. "If we can get some assistance from the government perhaps in terms of the depreciation period, more and more buildings will be able to do it."

She and past president Kalani Maika of Bankoh visited Hawaii's Congressional delegation in Washington last year to talk about that, as well as ADA compliance and incentivizing energy-efficient

Two days after visiting state legislators, Bollozos-Fraticelli was upbeat.

"The message we conveyed is that we want to be a resource and to partner with them. We are all for improving our buildings and our assets, to value-add for our ownership, but we want it to be a wise and reasonable plan."

Also on her radar is a bill introduced last year involving land-lease purchase. "I'm not sure if that will be reintroduced, but we certainly want to look into it and see where we can help."

Bollozos-Fraticelli has one more goal as the head of BOMA Hawaii.

"We have about 110 members, which



BOMA 2017 Board of Directors

As if further proof of BOMA's diversity was needed, just check out the new board of directors, and the variety of companies and buildings they represent. And say congratulations to:

- Arlene Dezellem of the Waikiki Shopping Plaza.
- Carlie Woodward Dela-Cruz of Bank of Hawaii on Kauai.
- Corinne Hiromoto of James Campbell Co. (Campbell Square).
- Erin Dayanan of Pacific Property Group (Plumbers and Fitters Local 675 building).
- Holly Morikami of Heide & Cook.
- Joshua Tokars of Armstrong Building Management (1012 Piikoi).
- Rachel Simmons of Shidler Pacific Advisors (Waikiki Marketplace).
- Robert Sugiyama of Howard Hughes Corp.
- Sandra Bollozos-Fraticelli of PM Realty Group (Ali'i Place).
- Kalani Maika of Bank of Hawaii.

is pretty good for a small state, but we'd like to bring in more people, owners, managers, related services."

And one thing remains the same after all these years. As valuable as BOMA's professional services are, she says, it's still "a nice social group."

For more information on BOMA, go to bomahawaii.com

Hawaiiana Celebrates Successful 2016, **Starts Strong in 2017**

Hawaiiana Management Company, Ltd., Hawaii's largest condominium and homeowner association (HOA) managing agent reported a winning 2016.

Thirty-two completed association developments representing more than 2,300 residential, commercial and resort units moved to Hawaiiana from other companies in 2016. Plus, seven completed association properties and four under development started with Hawaiiana in January of 2017.

For the eighteenth year in a row, Hawaiiana Management Company-managed properties and managers took top honors at the 2016 Institute of Real **Estate Management Awards** Event held at Waialae Country Club. Two Hawaiiana-managed properties and three managers were honored. Award-winning Hawaiiana-managed properties and managers include the following properties and managers:

One Ala Moana Condominium won Building of the Year-High-rise, 100-249 units. Davie Felipe, ARM serves as General Manager and Deborah Balmilero serves as Hawaiiana



The Palms 2016 Building of the Year

Management Executive.

The Palms Condominium won Building of the Year-High-rise, 100-249 units. Melody Pai, ARM serves as Resident Manager and Lois Ekimoto CPM and Irma Pante serve as Hawaiiana Management Executives.

Lorenia Leyva, ARM, Site Manager of Waikiki Marina Condominium won Member of the Year-High-rise, 100-249 units. Lourdes de Armas serves as Hawaiiana Management Executive.



Kathy Best, ARM, General Manager of Waihonua Condominium won Member of the Year-High-rise 100-249 units. Ralph Ahles serves as Hawaiiana Management Executive.

Alex Bresslauer, ARM, Site Manager of Terrazza/CorteBella/Las Brisas/Tiburon won Member of the Year Low Rise 600+ units. Craig Richter serves as Hawaiiana Management Executive.

Lois Ekimoto, CPM, vice president of training for Hawaiiana Management Company, Ltd. was installed as presidentelect for IREM.

During 2016, Hawaiiana also welcomed the first residents at communities in Mehana at Kapolei, Kapiwai, The Residence at Makiki and most recently, Symphony Honolulu and The Collection.

Hawaiiana Management Company is Hawaii's largest community association management company serving more than 600 existing associations on six islands with 58 new projects by the top real estate development companies under contract.

For more information on Hawaiiana's award-winning services contact Phyllis Kacher at 808-593-6896 or phyllisok@hmcmgt.com.



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One Ala Moana 2016 Building of the Year



Revamping the Lift System

Hawaii Kai Peninsula AOA opts to build a better outdoor elevator

BY DAVID PUTNAM

our property has a weather-beaten outdoor elevator. Do you repair it, or replace it? This was the dilemma facing the board of directors of the Hawaii Kai Peninsula Association of Apartment Owners.

"The challenge came in the form of building a better mouse trap," says Ken Watson, president of the Hawaii Kai Peninsula AOA. "We wanted to restore use of this elevator, but due to it being completely open to the elements found that we could do better than replace it with the same system."

Watson says the AOA board put the job out to bid. "We encouraged elevator companies to bid on replacing the unit along with designing a roof system that would keep it from deteriorating again, causing the same set of problems down the road," he says.

Watson, who holds an MBA, spent more than 40 years in the aerospace and defense industry, with degrees in mechanical engineering and management. He is a staunch ally of the Friends of Hawaii Robotics, a nonprofit that supports more than 8,000 elementary to high school students in the state, and each year he serves as a judge in the annual robotics competition at the Stan Sheriff Center.

With his engineering background, Watson was keenly aware of the

complexity of the elevator problem at Hawaii Kai Peninsula, where he and his wife have resided for eight years.

The community, he says, was facing "a situation that, for lack of a better description, is what we considered to be a design flaw. We have an exteriormounted access lift system that malfunctioned and became inoperable. It was important to us to repair the component, even though it is rarely utilized."

Bids to replace the elevator mechanics came in around \$17,000, Watson says. "We used the three-bid system to acquire bids and only one





company came in with a solution for our unique problem."

The Hawaii Kai Peninsula board chose RDV Elevators Professionals. who "understood the problem and came up with a solution to eliminate the problematic design of having the components exposed to the elements and having to replace the elevator components every seven to 10 years.

"RDV was able to meet our license and insurance requirements with ease, and the cost was \$39,850.00 to improve the longevity and reliability of our facilities."

The elevator project was started in November 2016 and was on schedule for completion in January.

"Sometimes the low bid is not what is chosen," Watson says, "and sometimes it's not even what you want."

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2017 Expo Highlights Education, New Products



Hawaii Buildings, Facilities & Property Management Expo

BY BRANDON BOSWORTH

he 10th annual Hawaii
Buildings, Facilities &
Property Management
Expo on March 8-9 at the
Neal Blaisdell Center will
feature more than 300 exhibits offering
a variety of products and services for
owners, managers and operations personnel of Hawaii's buildings, facilities
and property management companies.

"We focus on products and companies appropriate to this market,"

says Ken Kanter, exposition director, Douglas Trade Shows. "It's all about connecting people in business to those who need their products."

Kanter says "the strongest experi-



Ken Kanter



ence a buyer can have is at a trade show," thanks in part to the fact that those staffing the booths are knowledgeable about products and applications. For vendors, he says trade shows are "the fastest route into the Hawaii market and a cheaper, very efficient way to gather information about potential clients.

"It's all about

who need their

products."

–Ken Kanter

"It's a marketing venue in the purest sense of the word, incorporating marketing's four Ps of product, price, promotion and place," he says. Additionally, with expected attendance of 3,500 or more people, Kanter says the expo is a "great opportunity to network in a charged environment." connecting people

The free trade show will also feature 30 seminars on subjects relevant to the industry.

"Education is an important part of the show," Kanter says. "We aren't just selling booth space. We're trying to familiarize people with different issues and creating a space where people can learn, especially people who have a legal responsibility of their tenants."

A key theme this year will be aging buildings. "The problem of aging buildings has taken on more urgency," Kanter says. "For example, what does it take to turn over the plumbing system in a 20-story building?"

It isn't just buildings that are aging. According to Kanter, the combined issue of aging buildings and aging residents is reaching critical mass. "People want to age in place," he says. "At the same time, the building is aging and needs to be brought up to code."

The expo will feature four sessions on the subject, focusing on topics such as property management for older buildings, social welfare and legal issues.

A continuing trend on the sales side remains technology. "The constant changes in tech effects building automation,"

Kanter says. "When the lights go on and off, air conditioning, ventilation, security systems ... all of these can be tied into server systems. The technology is here and can make a huge difference in costs and sustainability if

you know how to apply it."

Another technology trend is microgin business to those rids. According to the U.S. Department of Energy, microgrids are localized grids that can disconnect from the traditional power grid and operate autonomously. Kanter describes them as "like hybrid car engines but for buildings." He adds that "facilities can use solar, wind or other renewables as a fallback position if the grid goes down," he says.

Other scheduled seminar topics include complying with Environmental Protection Agency regulations pertaining to hazardous spills, keeping fire alarms up to date, managing and maintaining swimming pools, the responsibilities of apartment owner associations and disparate discrimination in fair-housing.











Opening Up All Kinds of Window Styles

Here's a clear look at how to choose the best windows for your building

By Shawn Moseley

There are many options and choices when it comes to windows, all loaded with features, benefits and drawbacks. Add to this the nature of the window installation—is it a renovation or new construction? This adds more details to the right and best approach to consider. While considering different window types, it's wise to think about ventilation, maintenance, rain and general installation.

Here are some basic facts and considerations about window types and installation.

Sliding windows

Often selected in new construction and low rises because they look similar to sliding doors and are the most affordable type. Fairly easy to open and close, sliders have minimal hardware and are simple to install. Cleaning is easy on the inside of the building, however if you cannot access them from outside—on the second floor or higher. Cleaning becomes a big challenge. Most people don't want to hang outside a window to clean the non-operable side, so you hire a window washer, which comes as a maintenance cost. A couple of concerns are that they do block 50 percent to 60 percent of natural ventilation, and when it rains, if you do not have a sufficient overhang you have to close it.

Single- and double-hung windows

Historically, these are the most classic type of window made. Aside from their history, they share all the same benefits as a sliding window, with one additional drawback: more hardware



that requires more maintenance.

Awning windows

The most expensive alternative to the sliding window, the awning is typically chosen over sliders because you can keep the awning open in most rain conditions. They offer the same ease of cleaning from the interior as sliders, and like sliders they have the same challenges of cleaning from the outside.

Unlike sliders, awnings have a lot of operational hardware that with regular maintenance can last awhile, but this additional hardware is responsible for the increase in cost. A lack of maintenance on the hardware, especially the cranks that open them will leave the window unoperational with an expensive repair. Awnings are fairly easy to install but keeping them square and plumb is critical for the integrity of their seals.

One of the best benefits of an awning window is the typical "double seal" on the window sash they have from their design, which is perfect if you plan to keep them closed and run air conditioning year-round. However, unlike a slider, awnings only typically achieve 40 percent natural ventilation when opened, so in a naturally ventilated building, aside from a picture or fixed window that never opens, they would be the least effective.

Picture or fixed windows

Their sole purpose is to keep the elements out so you have a view framed like a perfect picture. There are manufacturers that make some large picture windows that get installed in luxury homes, high-rises and hotels. Not the easiest window to install as it typically takes two or three installers to handle them because of glass weight. If the window is dual pane, having two pieces of glass, it takes at least another person. Given the installation challenges, these are best installed by a professional.

Single-pane clear picture windows are effective for most site conditions in Hawaii because of our average climate. If solar heat is an issue, they can be tinted or a clear solar film applied to reduce the solar heat gain. If using dual pane glass with "low-e" for solar heat reasons, remember that while "low-e" keeps heat out, it also keeps it in. Picture windows typically can only be cleaned from the exterior.

Casement windows

Essentially a casement is an awning on its side, but because the weight of the glass is supported by the building itself, the hardware takes less stress. This reduction in stress allows you to fully open the window 90 degrees of the building. Cleaning is easy from inside, being able to access both sides when fully open. It also means that given the right wind direction, you can realize 100 percent natural ventilation like a jalousie or louver window.

The drawback to this is the way they open sideways. If the wind is in the right direction you get full ventilation, but if the wind is not you get maybe 20 percent ventilation. A casement window usually carries the same price ticket as an awning, or close to it, and with that the same maintenance necessary on the hardware to keep them fully operational.

Jalousie windows

Jalousies are extremely popular in Hawaii because of our trade winds and intermittent rain showers. They offer 100 percent ventilation and are easy to install.

Jalousies have been poplar in Hawaii for a long time, but also carry a challenge with their reputation as times

See 'MOSELEY' on page 38

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New Panels to Suit an Aging Building

Are your windows causing structural and safety issues in your building?

Driving around Honolulu, it's easy to see how the boom in development of dozens of new luxury condominium high-rises is changing the face of the city. In order to compete and stay current with new development, we've seen a significant rise in major renovation work taking place in Honolulu's buildings that are 40 years old and over.

Dangerous Component

Typically, older buildings hire a construction manager or compliance advisor to evaluate the overall integrity of the structure. One of the most common threads we've seen in these evaluations is that the windows have been designated as a "dangerous component," a term that has some associations scrambling and others scratching their heads.

The vast majority of association bylaws deem the windows and sliding doors installed in the units to be unit-owned and the owner's responsibility. So if the windows are deemed "dangerous," can the association force the owners to replace them? In most cases, the answer is yes. The board can unilaterally require all owners to replace their windows, as long as it can be determined there is a health or safety issue that affects the association if the windows are not replaced.

Jalousies are the windows of choice in many older high-rise condominiums here in Hawaii. Over time, the aluminum blade holders corrode to the point where they can no longer hold onto the glass slat. The smallest of breezes, a slight vibration, or simply the act of opening and closing them will cause the slats to release and fall out. If you take a closer look at some of the aging high-rises around town, it won't be hard to find some with slats that are





missing. The odds are that they simply fell out.

When the glass slats or glass panels fall on common area elements, they pose a dangerous threat to people walking on the property or on the street and sidewalk below. "I have heard too many stories about people getting hurt by falling glass," said Bob Barrett, president of Coastal Windows.

Damage to personal property is even more common. "I have been to a building that built a plywood structure for cars to park under because they said it was less expensive than the cost to repair the damage to parked cars," Barrett said.

So what is a good solution? The new and improved jalousie windows of today are a far cry from those decades-old jalousies. A security jalousie manufactured by Coastal Windows is engineered with a durable, thermal-welded solid vinyl frame and features "pinned" hardware clips and safety-tempered glass slats, providing increased safety and security. The innovative "pinning" system is designed with a high-strength acetal pin, inserted through both the hardware clip and the safety tempered glass slat, securing them from the interior of the home for superior security protection. Only by removing the pin can you pull the glass out.

Jalousie Windows and Egress

Current building codes state that every sleeping room below the fourth story shall have at least one operable window or exterior door approved for emergency egress or rescue. The units shall be operable from the inside to provide a full clear opening without the use of separate tools.

Local building codes currently exempt jalousie windows from meeting the Egress code since the slats in old style jalousies could easily be removed without the use of separate tools. However, despite the fact that they "technically" meet the code, using a jalousie window with a pinned hardware system as the only egress window is not recommended. It's just not safe for emergency egress or rescue in sleeping rooms below the fourth floor.

Options

So what do you do if your association's board wants to use these new and improved jalousie windows in the entire building, including the lower floors? Seek out a window manufacturer with new innovative products like an Egress Frame Systems, which virtually makes all of their windows egress compliant. An Egress "system" is actually a window frame, not a window itself. Smaller window units can be placed into the Egress frame enabling the smaller units to swing open for egress as one large unit. This gives the board the freedom of choice in selecting windows for the entire building.

Another option is changing the windows to a different style. Just because your building has jalousies now, doesn't necessarily limit your choices to only jalousie window replacements.

Awning windows are hinged at the top and crank open, allowing the same 100 percent ventilation and ability to keep the rain out that jalousie windows offer. However, with awning windows, you can maximize your view without the multiple panes of glass cutting through it, as in the case of jalousie-style windows. And commercially rated awning window have so much more to offer in the way of glass and hardware options that may allow you to address additional building concerns such as hurricane protection, increased security, and heat and noise control.

Ask an Expert

So how do you know what style of window, type of glass and hardware will best suit both your building and owners' needs? Do your homework, research your options and seek the advice and input of professionals. Speak with the window manufacturer and ask questions about the options that will work best for your particular building. What is the best longterm solution? Are you meeting the codes and wind loads depending on the location and height of your building?

Do they offer installation? If not, how do they recommend the window unit be installed? What sealant and flashing do they recommend?

We also recommend that you invite a local window expert to your board meeting for a presentation. This will allow your owners and board members to ask questions and address any concerns they have before they buy. Window replacement can greatly enhance the security, value and appearance of your overall building. With the right window selection, it is possible to make the next time you replace your windows, the last time you replace your windows.

Pam Barrett is the advertising and promotions director for Coastal Windows Inc., a local family-owned window and door manufacturer since 1990 located in the Waipio Business Park. For more information visit www.coastalwindows.com or call 676-0529.





Big Style, Big Impact with Big Doors

Replacing multiple doors with one wide unit improves the appeal of your building

By H.B. Cooke

Every building, even the best-managed ones, will require some updates from time to time. No part of a structure is immune to the wear and tear that comes with daily occupant use. The challenge most building managers have when faced with repairs is: Should I simply replace or is it an opportunity to upgrade?

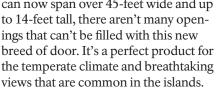
Before dismissing an upgrade as an unneeded cost, you'll need to consider the potential an upgrade could bring with it.

Take patio doors as an example. Your building could currently have standard-sized patio doors, transoms even. This may have been the norm when your building was built. Now "big doors" have the ability to replace both the old patio door and those transoms with one new unit.

can now span over 45-feet wide and up to 14-feet tall, there aren't many openings that can't be filled with this new breed of door. It's a perfect product for the temperate climate and breathtaking

Here are more reasons big doors should get consideration when it's time to upgrade:

• Big doors are the next evolutionary step in connecting a building with its surroundings. From the simple act of opening windows to the revolutionary development of the screen to keep unwanted pests out of a home, tenants have always enjoyed the opportunity to bring a little of the outdoors inside. The dramatic way big doors accomplish this





· Big doors blur the line between indoors and outdoors. Patios, decks, and gardens are no longer separated from the rest of a living space's smaller units. Big doors promote flow between interior and exterior in a way that's more intuitive and less forced. The amount of livable space expands without any square footage being added.

While big doors hold the potential for big improvement, there are a few design and engineering considerations for adding big doors to a building. Generally, gliding units that allow the weight of the door to rest on the sill provide more flexibility for replacement. Any units that hang the weight of the door panels from the top of the unit generally require structural reinforcement. Seek guidance from a licensed contractor or structural engineer when you're dealing with building upgrades.

Big doors make a dramatic statement while adding flexibility to your tenant's spaces in an unexpected way that will delight them. Their unique appearance and tangible "wow" factor will surpass

Not every building upgrade will

Big doors promote flow between interior and exterior in a way that's more intuitive, less forced.

The style upgrade alone will be striking and increase the value of your building. But when you combine it with the performance advances of current products, you've got a winning combination for you and a huge attention getter for current/prospective tenants.

Depending on your building, you may even be able to make a statement by replacing multiple old-style patio doors with a single big door. Since they is noteworthy indeed.

· Big doors add flexibility and boost quality of life. While many crave connecting their interior and exterior spaces, they also want the security and peace of mind of walls separating the weather and pests from a good night's sleep. When a beautiful day dawns, that will quickly become a must-have







result in an extreme redefinition of a space, but when an upgrade offers the opportunity to provide an advantage over similar available spaces, it is worth the time and investment.

H.B. Cooke is a sales representative at Andersen Windows. For more information, visit www.andersenwindows.com.



Retrofitting Windows for a Hurricane

Things to consider when planning to protect your windows



Windows and doors are a vital part of a building's structure, much like the tires on your car. You will need to replace them over time.

The first thing to do is measure your window or door opening. You should assess the condition of the opening. Look for structural or weather issues on the surrounding wall space. It is important to complete any needed repairs before installing your new windows or doors.

Replacing your windows and doors with new energy-efficient windows increases the quality of life for all your building occupants, can lower your energy costs and add value to your building.

When looking to start a window or door replacement project, you'll need to ask yourself a few questions. Many window and door dealers will offer a free site visit and consultation to walk you through the process.

What frame material do I need?

There are many options here: aluminum, aluminum wood clad, wood, fiberglass, vinyl, composites. Most have an exterior color that can match your existing product, but the structure, warranty and performance vary greatly among these products.

Do I need hurricaneimpact rated windows?

Because in Hawaii hurricanes occasionally roll through, you should take precautions to prepare your windows to take on the damaging winds and flying debris associated with them. Every time a hurricane threatens Hawaii we see stories on the news of homeowners nailing plywood over their windows to protect them. But there are other meth-

Window Type	Estimated Service Life (years)			
	Mean	Median	Inter-quartile Range	Characteristics
Aluminum	43.6	40	12.5	Low maintenance
PVC	24.1	22.5	15	Low maintenance, difficult to repair
Timber	39.6	35	16.3	High maintenance, easy to repair
Aluminum-clad	46.7	45	10	Low maintenance, easy to repair

ods and technically advanced products that homeowners in hurricane-prone areas could utilize to protect the windows of their homes.

There are two main ways to protect your windows against hurricane-force winds. Install hurricane shutters or install impact-resistant glass windows throughout the home.

Hurricane windows are not the same thing as impact-resistant windows. Impact windows are what you want if you want your house to have a better chance of surviving a hurricane.

Impact-resistant windows need to be paired with beefed up frames to offer sufficient protection from projectiles. These frames may be constructed of wood, metal, vinyl or a combination of materials and have stiffeners and reinforcement to make them much stronger than typical window frames.

If you are retrofitting an existing window, it is recommended to replace the entire window system, frame and all, for it to work as designed. Securing the window frame to the opening according to the manufacturer's specifications is key to keeping it intact under hurricane conditions.

Because impact resistant windows have advanced to the point where they are thoroughly tested to withstand Category 5 wind conditions and the debris that goes with it. What that means is that your home has a much better chance of remaining intact with minimal damage.

If one of your windows falls victim to a chunk of wood flying through it, the

air pressure in your home will expand rapidly (much like a balloon) and something will give way. It could be your roof, another window, a door, or even a wall. Once that happens, your home is extremely vulnerable and will quickly deteriorate with each passing minute.

What is the warranty of the product I am considering?

While many commercial structures in new construction only require a two-year warranty, you should be looking for a product with a substantial warranty. Many of the top manufacturers offer 10- to 35-year or even lifetime warranties on their products.

Does my manufacturer or dealer have warranty technicians on staff?

Ask your local dealer if they have warranty technicians locally in case any issues arise. Finding a repair technician in Hawaii that has experience and can work on your product may be difficult and once you have purchased the product, you may find yourself with little recourse.

Trisha Egge is vice presi dent of Maui Windows and Doors, offering sales, service and installation throughout Hawaii. She has been in construction management and renovation work for the past 15 years.

Ready to Replace Old Windows?

Treat yourself to a better view

When it comes to replacing old windows, there are several important factors to consider.

First, make sure to select a local/regional brand instead of a national one. Choosing products from a regional brand will ensure the company will better understand our island climate and its residents' needs. When you compare a regional product to a national one, the regional brand is tuned into our market.

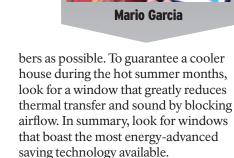
It's important to select a company with products that are specifically made to meet Hawaii's weather demands and engineered with Hawaiian homes in mind.

High-quality window construction is another thing to look for. While all vinyl windows may look the same, not all are manufactured with the same blend. Look for a window that has a master blend and make sure the product is made with top-quality materials

and cutting-edge technology. You'll also want to look for a window with 3/16 glass thickness to ensure that the product is durable and blocks more outside noise than standard-thickness panes. These distinguishing factors are sure to set these grade-A windows above the rest.

Pay special attention to the coating the manufacturers use to accomplish its heat-blocking quality. You will want to make sure your windows have a high-quality coating on the glass to get the protection you deserve. The ideal window will have glass coating that effectively blocks out UV rays, which reduces cooling and heating costs within local homes. The blend manufacturers use when fabricating the vinyl frame material is just as important.

Since we live in a tropical climate, it's crucial to look for a window that offers high heat reduction, which means the lowest heat gain coefficient num-



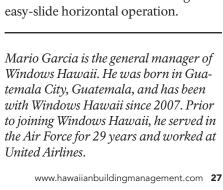
Although top-notch quality is of utmost importance when it comes to new windows, you also want to find a window that boosts your home's aesthetics.

If you want a cleaner look and minimized vinyl, expand your horizons and look for windows that have minimum frame width and maximum glass. You won't have a lot of extra vinyl with these windows because that area is minimized—look for a minimized height of the vinyl fame and an expanded viewable glass area. These windows will help you achieve that cleaner look, while offering more visible light and featuring expanded sidelines.

A heavy-duty, low-profile frame will not only provide enhanced aesthetics for your windows, but also a lifetime of durability.

Finally, when it comes to purchasing new windows, you'll want to find products that are easy to clean. Water and dirt will bead and run off of windows with an easy-clean coating. Windows with an inside sash tilt, in particular, will guarantee easy indoor cleaning of single hung windows. If your windows have rollers, look for tandem rollers with stainless steel needle bearings for easy-slide horizontal operation.





Maintaining Your Windows and Doors

Tricks of the trade to keep sliding doors and windows on track

As part of the building envelope designed to keep out the elements, windows and doors are clearly an area where regular routine maintenance is an exceedingly good investment.

Windows that don't open and close easily are more likely to be left in one position, which contributes to the deterioration of hinges and operators. Sliding windows and doors that do not have functioning rollers can result in damaged tracks, sometimes leading to water infiltration into substrate. Whether these are in individual residences or common areas, proper maintenance is crucial to the health of the building.

Replacing a window or door can easily cost thousands of dollars. Preserving what is there is inevitably the least expensive course. Casement, awning, jalousie and sliding windows are by far the most common window types.

With casement and awning windows there are dozens of types and sizes of window hinges, tracks and operator arms. Even for experienced technicians, identifying exactly what is needed to repair or replace these components can be challenging. And for windows 30 years old or more it is sometimes simply not possible.

If repair is an option, it is rarely inexpensive and may cost a few hundred dollars per window.

Prevention is the best option. Hardware should be cleaned periodically. Depending on the location, quarterly cleaning followed by lubrication is usually sufficient, but in areas that become soiled more quickly, more frequent servicing is required. If possible, follow the manufacturers recommended instructions. For newer windows and doors, this is likely part of the warranty requirements.

When specific identification isn't possible, there are general guidelines. Spray the components with fresh water. A

softer bristle brush should then be used with a mild detergent to lift dirt and surface deposits. Do not use harsh or abrasive cleaners. Rinse well with fresh water. Allow the surface to dry.

It is recommended that you use lubricants similar to what the manufacturer did originally. White grease should be used for gear drives such as operators. Silicone spray is for sliding or rotating joints. Original WD-40 (which now sells a new silicone lubricant) is not recommended on newer components as it tends to hold debris, but is recommended if the part is rusty, heavily corroded or stuck. It is important to wipe off any over-spray as this can damage some aluminum finishes and vinyl frame.

Sliding window and door rollers should also be lubricated with either silicone spray or WD-40 as outlined above. More often than not, it should be the silicone sprays for the rollers. It is imperative that the tracks on windows and doors be kept free of debris.

Weekly or monthly vacuuming should be performed so that the rollers are not rolling over dirt and debris.

While there are literally hundreds of window and door rollers, roller replacement is generally much less expensive than window operator replacement, making sliding systems one of the most economical in the long term.

Some newer louvered windows are virtually maintenance free. Unlike old jalousie windows, the gallery hardware that operates the clips is sealed, providing greater protection of the moving parts.

But preventative maintenance only goes so far. Building managers and boards should begin looking at the next generation of windows that they wish to install before the original windows fail (and end up in the parking lot below). New aluminum framed options are



joined by vinyl choices ideal for use in high-rise and "impact" applications.

Choose a dealer that offers both aluminum and vinyl frame options so the correct window type and brand can be selected for your unique applications.

The decision on new windows and doors should begin with evaluating the current needs. For example, will the space be air-conditioned or rely on cooling tradewinds most of the time? Double pane or insulated glass (IG) contributes nothing if the window is open, except initial expense and risk of seal failure. But IG in windows and doors is a significant energy saver when AC is used 24/7.

Low-e coatings continue to evolve and can contribute greatly to reducing solar heat gain, but also add to the cost of windows and doors. Since there should be no visible difference between low-e coated surfaces and non-coated surfaces, know when and where to use low-e glass can help reduce the cost without compromising performance or changing the look of a building.

Select a dealer with knowledgeable estimators who will to come speak at AOAO board meetings to help owners understand the options during initial discussions.

Lastly, choosing a supplier who not only installs but services windows and doors will greatly reduce the inevitable post-installation service issues. This reduces questions that arise about whether an issue is a manufacturer or installer issue.

Frank Alexich is vice president and general manager for Screens & Things Inc. and its subsidiary The Window & Door Store. A graduate of the University of California, Berkeley, he joined the company in 2005.

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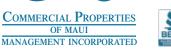
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Clean Solar Panels for Full Power

Property managers must heed maintenance requirements to reap maximum energy benefits

BY DAVE DONDONEAU

Roofs, Jodi Maero will tell you, are often taken for granted until it is too late.

And so are the solar

panels on top of them.

"A lot of the time when it comes to

"A lot of the time when it comes to the roof or anything up top the feeling is out of sight, out of mind," says Maero, vice president of Rainbow Roof Maintenance. "Some of our property managers will ask us about maintenance and cleaning solar panels and we recommend doing it at least once a year, but we're more of a roofing company.

"At home we have our own solar panels and clean them at least once a year."

The Maero family has an edge on most solar customers because roofing and what's on top are their livelihood,

so they make upkeep a priority. Since they added 30 solar panels to their home five years ago they have paid HECO's minimum bill of \$18 a month.

"We probably have too many panels," Maero says, "but our bill is much better. I remember Christmases when we would light up the house like the Chevy Chase in 'Christmas Vacation' and the bills would be over \$600."

Maero, like many customers, isn't sure how much energy credit her panels are missing out on because of the vog, dust buildup, bird droppings



Fred Brooks

or tree sap to name just a few of the overlooked items that can prevent solar panels from peak performance.

That's why Fred Brooks founded Pacific Panel Cleaners in 2009. Brooks

started in the solar industry in 2006 when solar was starting to boom and created his company to fill the maintenance void after realizing some solar salespeople and companies weren't telling customers about maintenance needs.





Fred Brooks, owner of Pacific Panel Cleaners, offers these tips for property managers who want to get the most out of their solar systems:

- Know and understand the monitoring system. "Read the manuals and ask if you don't understand."
- 2 Know your PV Panel and Inverter Manufacturer recommended maintenance schedule and clean it once a year. "If you don't maintain it they won't enforce the warranty. Have proof of your maintenance."
- 3 Protect your investment. Get the panel system cleaned and inspected once a year because it makes you money. Make sure there are no tree limbs obstructing the sun or anything that can cause shade or drop sap on the panels.
- 4 Inspect for corrosion in the balance of the system-all the accessories, wires and roof attachments.
- 5 Write out a maintenance schedule. "Look at your monthly monitoring. Look at your system every six months. Clean it once a year. Protect your investment. Write a maintenance schedule. I have clients who need maintenance four times a year just because of their location."



Cleaning away rust and corrosion can restore the PV system to full power.

"What really got me was some of the ethics," he says. "Some salespeople made a lot of money saying once panels are up there is no need for care. But, if you look at the manufacturer warranty they all have maintenance requirements for the warranty to be enforced. And they have to be clean to



Damage might involve cracks in the panels.

get the most solar power out of them. Property managers need to know what the warranty requirements are. That is the one piece of advice I'd give anyone who has solar."

Pacific Panel Cleaners is one of a handful of companies specializing in solar maintenance in Hawaii. Brooks recommends an annual cleaning and inspection at the minimum.

"It's like going to get your oil

changed," he says. "They change the oil but they check out a lot of other things that can go wrong with an inspection."

Brooks says he has a client on Maui who was losing 30 percent of his solar power because of tree sap, but refuses to cut the overhanging tree because he likes it.

"You can have a mango tree that was 10-feet tall when solar was installed and now it's grown over the roof," Brooks says. "Salt air can affect panels. Volcanic dust. Water spots. Pollution. These are things you don't think about. Panels are Direct Current flows, so a bird dropping on the seventh of 12 panels can affect the entire string. People don't realize that type of stuff."

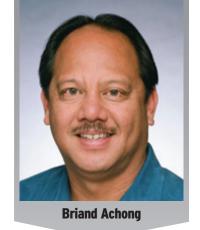
Brooks advises property managers to understand monitor systems provided with many solar installations as well as understand the warranties and the maintenance required for it to be enforced. He also suggests doing periodic physical inspections when possible.

Dirty solar panels can lose up to 30 percent of their solar power, Brooks says.

"I can't go out and tell people you'll save 10 to 15 percent on your energy bill or produce this much more with maintenance," he says. "But the facts are there. One of my favorite parts of this job is educating customers on how it works and how to maintain it. They don't always get that when they're sold their systems."

The Value of Solar-powered AC

Taking advantage of advances in technology can reap immediate savings and energy efficiency



For residential and small commercial firms, PV-powered systems are among the most frequently implemented solar cooling technology.

Solar-powered mini-split systems harness sunshine abundantly available in Hawaii to help power one of our most costly comforts—air conditioners. With the advances in technology and the push toward energy-efficient appliances, the convergence of these have been a long time coming.

Many businesses have reduced or eliminated their electric bills with PV systems. Adding a solar-powered air conditioner on a separate or hybrid system can free up space to create more capacity.

So is there a benefit to taking your AC solar and letting the sun help power a key operating cost? Absolutely, especially for applications that utilize cooling during peak sun hours, such as classrooms and businesses.

Hybrid solar-powered air conditioners are keyed in to prioritize the draw on solar power during the peak sun hours for maximum efficiency and will transition automatically to sip on grid power as the sun goes down, lowering key operating costs.

A common question: How complex is an installation? The answer: Not very. LEZETi solar-powered air conditioners are among those recognized by HECO as basic appliances. The only difference between this AC and a standard minisplit system involves inputs.

Solar-powered air conditioners have the ability to receive direct DC power from the sun to power the unit. There is zero feedback to the grid. DC-driven components contribute to the ultra-quiet operations of these solar-powered air conditioners. With variable speed motors, there is no sudden on/off of



the compressors, but a gradual ramp up and ramp down.

The LEZETi units install just like standard mini-split ductless air conditioners. The only difference is the PV input requires three PV panels and the respective electrical breakers and conduit to be installed. Typically, PV panels are installed on the rooftop and conduits run directly to the outdoor condenser.

Another common question: Can these units run when there is no sun? The answer: Yes. These units can be installed and run exactly like a standard ductless mini-split system—without solar PV input. These units are not sunlight reliant, but will prioritize available sun to power the unit when available, then draw from the grid as a supplement.

Most are residential home installations, but we've also installed at several DOE portable classrooms with poor or no AC. Waianae High School, James Campbell High School, Laie Elementary and two elementary schools on Molokai all have adopted our technology into classrooms.

Briand Achong is president of Greenpath Technologies Inc. GPT is a solar power systems contractor in Honolulu that can provide turnkey photovoltaic installations including the system consultation, engineering, design, installation, permitting, maintenance and financing. For more information go to greenpath-tech. com or call 748-8418.



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The Right AC for Every Room

Cooling options range from window to ductless to PTACs

Building management professionals have more options than ever in providing individual cooling control at a desired level.

While centralized, ducted systems using a rooftop chiller usually provide the most cost-effective cooling and are most practical for large spaces under common control, for townhomes, hotel rooms, rental apartments and other individualized situations, there are better options.

The room air-conditioner, or window unit, is the first solution that comes to mind to cool a smaller space. While there is an advantage in the low upfront cost, this is quickly offset by poor aesthetics, both interior and exterior. Window units also tend to create much more interior noise than other solutions, detracting from the desirability of the living space.

For multiple-unit installations in apartments, townhomes, hotels, senior facilities or even condominiums, packaged terminal air-conditioners (PTACs) provide many advantages. They're quieter and more energy-efficient than room air conditioners. And since the

PTAC design is based on a chassis that slides into a standardized sleeve, it also facilitates repairs slide in a spare chassis and then fix the non-operational unit when you have time. Your tenants or residents will thank you for that repair speed.

For facilities with variable occupancy such as hotels, senior communities or rental apartments, some PTACs offer sophisticated

features. Amana PTACs, for example, offer a digital control system that can not only save up to 35 percent in energy costs over PTACs that lack it, but it also offers centralized control of individual





Ductless split-system air conditioners like Carrier's Performance Series offer high energy efficiency, quiet operation and maximum flexibility.

PTAC units. The units sense whether the room is occupied or not, and adjust accordingly. Centralized control means that from one screen, you can see how all units are running, and if repairs are

Ductless split system (DLS) air-conditioners such as one from Carrier offer great flexibility. DLS systems deliver high-energy efficiency and low-interior noise, plus ease of installation since no expensive ductwork is required. They are an ideal way to add low-cost cooling to selected rooms or areas.

The "split" in split systems is what makes them so desirable. The compressor goes outside the living space. Interior fan coils—where the cool air comes



out—come in a variety of fixtures for wall and ceiling mounting. This allows you and your installer to customize cooling to the shape, structure and aesthetics of the structure. Both single-split and multi-split systems, where a single compressor drives multiple fan coils, are available.

Inverter technology improves energy efficiency, saving you significant dollars on energy costs. And because of the way they are designed, DLS systems can be quieter than window units by as much as the volume of a loud TV.

Building management professionals have more options than ever in providing individual cooling control at a desired level.

Some DLS systems also offer a dehumidification feature that provides clean, cool and dehumidified air for the ultimate comfort that is healthy for your residents and the building interior. Moreover, the DLS is a heat pump that can also heat the room during those chilly winter days.

These options of window air-conditioner, PTAC or DLS system provide individual space cooling solutions at a range of upfront and lifetime operating costs.

John Arizumi is president of Carrier Hawaii, the largest air-conditioning distributor in Hawaii with four locations on three islands. He is a past president of the American Society of Heating, Refrigerating and Air Conditioning Engineers, Hawaii Chapter. For more information visit carrierhawaii.com or call 677-6339.



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Four Simple Steps

Prevent air-conditioning leaks and water damage

Please consider these three questions:

- 1. Do you have a chilled water air-conditioning system in your building?
- 2. Are owners experiencing water leaks from their individual air-conditioning units?
- 3. Are insurance premiums and/or deductibles rising due to air-conditioning water damage claims?

If you answered "yes" to only question No. 1, you can expect questions 2 and 3 to become a reality. Because of the age of many of the buildings in Honolulu, Waikiki and other parts of Oahu, this is a glaring reality right now. Some buildings are 20, 30 and 40 years old and older, and the chilled-water AC components installed by developers were not made to last that long. Components are rusting, corroding and failing, which causes leaks and water

damage. Let's consider an AC unit that would be mounted in the ceiling, although all chilled water AC systems have the same components.

Chilled water from the chiller lines runs through a fan coil and air is blown through the coil to push the cool air out of the air vents into the room. The key word here is "water." Condensation is created when warm, humid air comes in contact with the colder metal of the coil and pipes. This condensate water drips into the drain pan located below the coil. The water drains through a drain hole located in the drain pan and flows into a drain line that leads to a water drain.

Water damage can happen a couple of ways. Water can overflow out of the drain pan and onto the ceiling or floor when the drain hole or line is plugged because of a build-up of algae or slime. This can happen even when regularly scheduled maintenance is done to the line and drain pan. Because of age, the metal of the coil or drain pan rusts and corrodes, then holes form and leaks occur. In a vertical style unit, where the

Cathy Hankins

component that could leak water. These are considered "high risk" components. Other high-risk components that should be looked at are the shut-off valves, the actuator or valve motor (which regulates the water flow to the coil) and any special piping such as spiral flex lines. If the condition of these items along with the coil, coil supports and drain pans are monitored, they can be replaced before leaks occur. A mandatory inspection can be required by the AOAO in conjunction with Hawaii's High Risk Components law, HRS §514B-138. Inspections should be done by a reputable company experienced with chilled water AC systems. Plumbers and freon AC technicians are not always versed with these components and/or may not recognize ones at risk.

Second, each time the inspection results are received, they should be reviewed by the AOAO and the owners of the AC units. Within an allotted amount of time, owners would need to replace those parts noted to be at risk for a leak and provide evidence that they had done so.

Third, the AOAO should also require regular maintenance to clear the drain pan and drain line of algae and slime at periodic intervals. As a rule of thumb, if an AC is used 24/7, the interval should be every 90 days. In some cases, 60 days would be warranted. If used only in the evenings or weekends, then every six months may suffice. If used even less, maintenance should be done at least annually. For all time intervals, there is no guarantee that the drain line will not get clogged and the drain pan overflow before the next scheduled maintenance.

Fourth, the AOAO and owners may want to consider installing an emergency catch pan and/or overflow safety switch for each of the AC units. This is different than the "water detection" sensors or alarms that are sometimes

Leaks and water damage can be prevented if the AOAO and unit owners are willing to be proactive.

damage on flooring, ceilings and walls. Not to mention the additional headaches when the water flows and creates damage in multiple units and common areas. But these leaks and water damage can be prevented if the AOAO and unit owners are willing to be proactive and take four simple steps.

Before taking any steps, the AOAO and unit owners need to know how a chilled-water AC system works and what causes the leaks and water

coil leans more upright, metal supports that hold the coil to the walls also rust and corrode. The coil can dislocate from the wall and leak.

So what are the four simple steps to prevent leaks?

First, an inspection of every AC unit should be done periodically, with a report that shows the condition of each



offered. The overflow safety switch will shut the water to the coil via the actuator or valve motor when the water in the drain pan reaches a certain level. This will only work if the actuator or

valve motor is working and in good condition. Some drain pans are not deep enough to hold an overflow safety switch. In these cases, an emergency catch pan will need to be installed under the drain pan.

When the water overflows from the drain pan, it will be caught in the emergency catch pan and then the switch will be activated when the water reaches a certain level in that pan. This will eliminate the danger of water overflowing due to clogged drain lines. This is especially helpful when units are left unattended for long periods of time, usually due to travel.

Rusted and corroded components of chilled water AC systems are a real threat now. Drain lines are getting clogged and drain pans are overflowing. Floors and ceilings are getting damaged. Insurance claims and prices are rising. Don't hesitate; damage is preventable. The steps are simple. If you haven't already, help your building take them.

Cathy Hankins is the former operations manager and now head of marketing for PurAir Hawaii, an AC company specializing in chilled water systems. She can be reached at 694-3305 or cathy@purairhi.com.



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FIRE PROTECTION









Moseley

Continued from page 20

have changed. With an increase in crime and the ease of removing the glass blades, they are often replaced by other windows that are more secure when they are closed. Jalousies also allow the most air and water infiltration, which when closed for air-conditioning or bad weather is not desirable.

Louver windows

Louvers and jalousies share all the same positive benefits regarding full ventilation and being open in the rain in most conditions, and look very similar aside from the hardware. But well-built louvers, unlike jalousies, have significantly better hardware and with proper hurricane screens achieved certified hurricane performance for wind and water, as well as impact. New designs have also introduced retaining clip systems that incorporate tempered safety glass so blades cannot fall out in high elevations and offer increased security on ground floor elevations. Should the glass be broken it will fall apart in little pieces versus large damaging blades. Louvers are also very popular in "mixed-mode" designs where both natural ventilation and air conditioned spaces are required to reduce energy loads and increase efficiency.

When you decide what window is best for your building, be sure to meet with the manufacturer or representative for them.

Shawn Moseley is the Territory Manager for Breezway at their local manufacturing and sales facility on Oahu. He enjoys having 25 plus years of residential and commercial sales and consulting in the window/glazing industry.



For example, according to a National Safety Council's report, in 2013 more than 175,000 people were injured on ladders severely enough to require a trip to the hospital. Of all occupational injuries, falls are the second leading cause of death next to highway crashes. Workers in the construction industry are most at risk.

"Without better training and continuous innovation in safety, planning and product design, we



Ryan Moss

will continue to see far too many fatalities," says Ryan Moss, ALI president and CEO of Little Giant Ladder Systems. "National Ladder Safety Month will heighten awareness, reinforce safety training, and educate homeowners and working professionals. The American Ladder Institute is calling upon all individuals

and organizations throughout the nation to promote and to participate in ladder safety."

Property and resident managers have the dual responsibility of protecting both workers and residents. Fortunately, there are simple steps that can be taken to help ensure safety when ladders are in use.

"While it is important that signs are posted around the work zone for the safety of the

For more information about National Ladder Safety Month, visit www.americanladderinstitute.org

residents and the ladder user, the key to ensuring safety in your building starts with the proper selection and use of the ladder," Moss says. "There are many types of ladders available, and they all have a different purpose and use. The ladder user should be well versed in how to identify the right ladder for the job as well as know ladder safety basics, including proper inspection of the ladder prior to starting the job.

"It's important to make sure you have a conversation with your contractor or employees about ladder safety and training prior to the start of any work taking place."

Moss adds that a 2016 research study by ALI, a nonprofit founded in 1947 to promote ladder safety, showed the two most common causes of ladder accidents are over-reaching and missing the last step when climbing down.

"Making sure your contractor, their team or your employees are properly trained in ladder safety is key to preventing these common ladder-re-



lated injuries," he says. "The 2016 ALI research study revealed that 75 percent of participants felt that ladder accidents in the workplace could have been avoided with proper ladder safety training."

Matthew Giraudi, lumber supervisor at Hardware Hawaii, offers additional tips for ladder safety. "Have another guy at the bottom to keep the ladder stable,"

he says. "Don't use the top two steps. Be sure to always put the ladder away as soon as you're done."

If working with electrical systems, Giraudi strongly recommends using a fiberglass ladder to minimize the risk of shock.

Chris Filardi, vice president of marketing for Werner, also stresses the importance of choosing the right ladder. "Ladder safety begins with selecting the right ladder for the job," he says. "Choosing the appropriate ladder depends on a number of factors including style, reach height, duty rating and material. Regardless of the project, all maintenance professionals should inspect their ladders before each use."

LadderSafety

THE RIGHT WAY

- Properly setup and use the ladder in accordance with safety instructions and warnings. Wear shoes with non-slip soles.
- · Center body on the ladder and keep belt buckle between the rails while maintaining a firm grip.
- Haul materials with a line rather than carry them up an extension ladder. Use extra caution when carrying anything on a ladder.
- Climb facing the ladder, move one step at a time and firmly set one foot before moving the other.
- Have another person help with a heavy ladder. Have another person hold the ladder while you are working on it.
- Move materials with extreme caution so as not to lose balance or tip the ladder.

THE WRONG WAY

- Don't stand above the second step from the top of a stepladder or the fourth rung from the top of an extension ladder.
- Don't climb a closed stepladder. Don't climb on the back of a stepladder. Don't stand or sit on a stepladder top or pail shelf.
- · Don't climb a ladder if you are not physically and mentally up to the task.
- Don't place the base of an extension ladder too close to or too far away from the building.
- Don't over-reach, lean to one side or try to move a ladder while on it. Climb down and then reposition the ladder closer to your work.
- Don't exceed the maximum load capacity or duty rating of a ladder. Don't permit more than one person on a single-sided stepladder or an extension ladder.

SOURCE: WERNER



K&N Adds 4 to Team

Insurance and bond brokerage company King & Neel, which will celebrate its 50th anniversary in 2017, has announced the addition of four

> new members to its team.

> > Frank Wirt



Frank Wirt

has 16 years of experience negotiating surety facilities for contractor and developer clients. He is past president of the Construction Financial Management Association.





Jason Kott

insurers and agents, with a focus on construction and development.

Gladys Smith rejoins K&N as account manager. She has more than



Gladys Smith

15 years of commercial insurance background in construction, condo program and hospitality. Jeff Moore

rejoins the agency as operations manager. He has more than 20 years of experience in insurance agency sales and operations with a focus on the construc-





Exchanging Survival Tales

BOMA Hawaii recently hosted a panel session titled "Day of Crisis: The Aftermath" during a trade show and networking event at the Hawaii Prince Hotel. The panel, which focused on how Hawaii made it through recent storms, included (from left) mediator Steven Sullivan of Shidler Pacific Advisors; Rory Reiley, engineer at TOPA Financial Center; **Kendall Doi**, operations director at Pearlridge Center; Tracey Wong of Insurance Solutions LLC; and mediator Joshua Tokars, senior accounts manager at Armstrong Building Maintenance.

Popa, Kamalii Take New Posts

Nona Popa has been named maintenance applications supervisor at GP Maintenance Solutions and Christina Kamalii has been promoted to inside sales lead



Nona Popa

at GP Roadway Solutions Popa will supervise technicians in the



Christina Kamalii

application of anti-corrosion coatings, surface protectant and asphalt sealcoating teams. Previously, she was the bidding and pricing specialist for Peterson Sign Co. Kamalii will

supervise inside sales team and manage customer relations for the company.



Hawaiian Properties Ltd. recently held its annual seminar for board members at a luncheon at the Ala Moana Hotel. Guest speakers included John Morris of Ekimoto & Morris LLC, Honolulu Police Officer Taylor Hoopii and Christian Porter of Porter McGuire Kiakona & Chow LLP. Also, 15 vendors displayed their products and services. Among those attending were, from left, Kanani Kaopua, Hawaiian Properties President Dass Ramadass and Kristi Hirota-Schmidt.

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