

A publication of the San Antonio Association of Building Engineers

July 2002

Mark Your Calendar-

JOIN US FOR OUR JULY LUNCHEON

Sponsored by York International

Please join us on Wednesday, July 17 at the Old San Francisco Steakhouse for our monthly membership luncheon, sponsored by York International. SAABE members will receive a fax and email notification of the meeting topic. Don't miss this chance for learning and networking. As "The Charlie" said in last month's column, "Networking is the key! Take the time to attend monthly SAABE meetings. Meet some old acquaintances, discuss some failures, and share your experiences with new and upcoming engineers." We hope to see you there! *

June Door Prize Winners

Tim Young: Small ice chest (donated by Holt Power Systems)

Jerry Lovell: Large cooler (donated by Holt Power Systems)

Ernest Lesa, Mike Alvarez, and Roland Ortiz: ADA hardware (donated by Hutchinson Supply)

If you'd like to donate a door prize, please contact SAABE president Elena Castillo. Thank you to our door prize donors. •

Tech Talk #62

by The Charlie

WEATHERPROOFING, SEALING, CAULKING, GLAZING, AND WET SEALING

(Taxes, Roofing, and Flashings not included!)

Over the years, we have participated in the renovation of the exterior components of several buildings in the South Texas area. We have received more than a fair share of bumps, lumps, and occasional scars. On each of these tasks, something new was discovered or something was overlooked because an assumption was made. First, never assume anything. "If it is not set in stone or written on paper, it's not included!" For your convenience, we have attempted to compile almost everything imaginable should you become involved in such an undertaking. We hope that the following article will help you overcome any issues in renovating the exterior of a structure. Although there are many types of exteriors, we will attempt to use the most common as example. Three things are for certain, though – weatherproofing does not include flashings; caulking and sealing are not one in the same (still trying to figure this one out); and glazing does not necessarily mean weatherproofing!

Structures

Many of today's buildings in the San Antonio area were constructed in the early to mid 1980s. A large number of these structures have received some type of repairs to the exterior structure due to the failure of the sealing components used on the exterior of the building. For most of these structures, the sealing components have reached the end of their useful life.

The exterior components of these buildings vary dramatically, but no matter what the construction materials are composed of, the exterior is commonly referred to as the "skin" of a structure. Please note the skin does not include the roof. The skin can be of anything from pre-cast panels with windows and mullions to curtain wall with ribbon type window systems. All, however, require periodic maintenance, and/or will require complete restoration at some time. The materials used to seal the skin on these buildings for the prevention of the exterior environments entering the building are at or have surpassed the end of their useful life in most cases, and a complete renovation to the sealing methods may be in order. Please note – the identification of which joints need addressing and the extent of the repair should be left up to a professional consultant. Additionally, this type of repair will be a capital expense and will come directly out of the landlord's pocket, so typically some landlords will resort to "patching/band-aiding" as opposed to restoration.

(Continued on page 4)

A Message from the President by Elei

by Elena C. Castillo

Recovering From Your Flooded Home

We have witnessed the recent torrential rains which have caused minor to severe damage to our homes and property. This damage consists of minor things like roof leaks, loose shingles falling down, tree limbs breaking off, or severe damage such as washed out crops, plants, trees, or even flooding in our neighborhoods. The most severe is the flooding of our homes and vehicles and watching them float away—or watching them fill up with water, causing mass ruination to our belongings and things that cannot be replaced.

In an effort to restore ourselves and our homes to almost previous conditions, below is a list of items we can follow to make our transition just a little bit easier.

Many of the contents of our homes may look like they could be beyond hope, but many of our belongings can be restored. If done right, our flooded home could be cleaned up, dried out, and rebuilt sooner than you think. When the water goes down, check the foundation – it may have been weakened. The electrical system surely shorted out, so turn off all power until you have checked it out. If in doubt about certain items the flood leaves behind, throw it out – it could make you sick.

First thing on the list: Look after yourself and your family. Everyone's life has just been turned upside down from this disaster. Everyone is stressed, fatigued, and it will take some time to get things back to normal. Watch out for health hazards, too. Focus on the obvious tasks of cleanup and recovery. Your hidden enemy is stress. Watch for it.

- Keep the family together and discuss the problems at hand.
 Be understanding with children, as they are also going through a rough time. Rest as often as needed and eat well; everyone needs a high energy level at this time. Schedule small jobs first you probably have a million to go.
- Stay as clean as you can and wash your hands frequently
 with soap and water. During floods, you may be exposed to
 dangerous chemicals and germs that you are not used to,
 and they could make you very ill. Be sure to have plenty of
 fresh water on hand, too.
- When moving heavy objects or furniture, get help. After all, things get pretty heavy after a flood, as they are saturated with water and are much heavier when wet.

Once it is safe to go back in, your home may need some type of protection. Further damage can be prevented because structural, electrical, or other hazards could have occurred as a result of the flood. If you feel uncertain about the right thing to do or you wonder if the job is beyond your skill or physical strength, contact the professionals.

Before entering your home, be sure all electrical power has been turned off, as well as the gas or propane valves. Do not smoke in this area, or use candles or open flames, as this could cause an explosion. Check for broken or leaky water pipes.

Getting organized and planning ahead will help you make the most of your time and money during the cleanup period. You can ask yourself if you should rebuild your home or relocate. If you do rebuild, your plan should include the flood-proofing measures that can be incorporated with repairs to save you thousands of dollars in the future.

- List the damage on your home and take pictures. Good records are needed for insurance claims, applications for disaster assistance, and income tax deductions.
 Throw out trash and rotten food.
- Check for any structural damage to your home. Is there evidence of broken or cracked basement or foundation walls? Shifted stairs or slanted floors or walls?
- Make sure it is safe to work in your home. It must be safe and sound.

Drying out your home will take time, as floodwaters damage materials, leave mud, silt and unknown contaminants, and promote the growth of mildew.

Lower the humidity and stop rot and mildew as soon as possible. Open all windows during the day, use fans to move the air, and open all doors and cabinets. Most of all, be patient. Drying out your home could take several weeks.

Food Safety

The U.S. Department of Agriculture operates a food safety hotline. Professional home economists can answer your questions about whether to keep or discard food. Call 1-800-535-4555 between 10:00 am and 4:00 pm, Eastern Time, Monday through Friday.

Once the drying out is completed, the rest of your work will be much easier if you have heat, electricity, clean water, and sewage disposal. However, waiting for the professionals to make repairs may take some time. Therefore, perform more cleaning until all utility systems are restored. All walls, floors, closets, shelves, contents—every flooded part of your house should be thoroughly washed and disinfected. Purchase plenty of cleaning supplies.

Voluntary agencies, businesses, insurance, and government disaster programs can help you through your flood recovery. Full insurance coverage on your home will help alleviate any extra expenditures such as professional cleaning and reconstruction.



June Luncheon: Are You Up-to-Date on ADA Requirements?

Mark MacDonald of the City of San Antonio's Disability Access Office provided over 70 attendees with a summary of new sidewalk and pedestrian accessibility requirements. He described several scenarios, including cross-slope problems that present hazards to wheelchairs, which might roll out into the street. He also provided visual aids to illustrate what the new requirements should look like.

He reminded attendees that property owners (even residential property owners) are responsible for the upkeep and repair of sidewalks on their property. He also clarified the roles of the state and the city in enforcing ADA complaints. The state handles all ADA complaints, while the city becomes involved before a certificate of occupancy is issued, to ensure that all requirements are met.

Don't miss the July SAABE program – come and visit with other building engineers and learn from their experiences.❖



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In Memoriam

Jim Lee of Brandt Engineering passed away on June 18. SAABE extends its deepest sympathies to the Lee family and to Jim's coworkers and colleagues. •

Advertise in the Upcoming SAABE Membership Directory

The new SAABE Membership Directory will be published this summer. Don't miss your chance to reach SAABE members with an ad in the directory.

Prices:

Cover (limited availability):

Back outside: \$299 Front inside: \$249 Back inside: \$199

Full page: \$149 Business card: \$99

Send ad copy (preferably in TIF, EPS, or WMF formats) and payment to SAABE, 14602 Huebner Rd, #116, PMB 149, San Antonio, TX 78230, or email to laurabray@braycommunications.com

Call 210-408-1699 for ad dimensions, or visit SAABE's web site at www.saabe.org. •

(Weatherproofing-continued from page 1)

Life Expectancy

A typical life expectancy for these seals should be approximately twenty years. However, many factors may very well reduce this amount of useful life. These factors can range from the type of materials and the methods/procedures used in original construction, movement, relative location or UV exposure, and repairs where the use/procedure of bond breakers/primers was less than desirable. Another factor in seal failure is when silicon is used to repair a urethane seal, or vice-versa, and the proper procedures were not followed. All of these failures create havoc for us after every rainfall. On the brighter side, as least during a drought there were no leaks.

Next Month: Joints and Inspections

CHARLIE'S LAW: Smith & Wesson: The original point and click interface!

JUSTA MAINTENANCE MAN *

It Pays to Advertise in SAABE TIMES

| Dimensions | 1 Issue | 3 Issues | 1 Year |
|---------------|---------|----------|---------|
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| Half page | \$60 | \$150 | \$575 |
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Do We Have Your Email Address?

SAABE often receives information on local seminars or training sessions that's too late to print in the newsletter. If we have your email address, we can send that information to you right away! Send your email address to laurabray@braycommunications.com, and be sure to receive the latest news! *

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SAABE Membership Survey

The SAABE Board is seeking your input for new programs, meeting formats, and topics. Please take a few moments to fill out this survey and fax to 210-408-1799. Thank you for your input!

Education Topics: Circle the topics that will expand your knowledge of building engineering and meet your personal interests.

HVAC

- New refrigerants
- Cooling towers
- Water treatment
- Chiller performance & testing
- DDC
- Airflow & testing
- IAQ
- License (City of San Antonio)
- VAV
- Boilers
- Pneumatic controls

FIRE CONTROL

- City codes & testing
- Elevator testing
- Fire drills
- Sprinklers systems
- Actual events (causes & prevention)
- Sprinkler testing
- Sprinkler components

ELECTRICAL

- Electrical Maintenance License (City of San Antonio)
- Energy savings
- Thermodynamic testing
- Actual fires & causes
- City Code compliance
- Lighting & energy savings
- CPS power factor and billing
- Emergency Generator testing and preventive maintenance
- Dedicated circuits & voltage regulation

SAFETY

- Insurance requirements & inspections
- Writing & implementing Hazardous Communication programs and inspections
- Personnel Protection
- Understanding MSDS
- Handling Hazardous waste
- Employee training
- OSHA requirements
- Failed OSHA inspections & causes
- City emergency planning

PLUMBING

- Stack effect & pumps
- Water treatment
- Mold & Mildew
- Sewers & backups
- Pumps displacement, turbulence, & testing
- Sewer treatment systems

BUILDING

- Roof inspections & repairs
- Building exterior inspections & repairs & PM
- Lawn sprinklers
- Rain runoff & flood control
- TNRCC regulations
- SAWS rules & regulations

| Add any other topics you'd like to hear about: | |
|--|--|
| | |

Educational Forums: Circle the type or types of meetings that would meet your needs and your schedule.

- I) Monthly Meetings with professional speakers from organizations or institutions. An additional fee of \$15 for each engineer would be necessary to provide for the cost of these meetings.
- II) Brown Bag Lunch meetings with speakers of expertise in a "selected by you" topic. A fee of \$25 would be needed to cover both a provided lunch and speaker.
- III) Half day Seminars for more in-depth coverage of the areas of concern as indicated by your selection of the listed topics below. A fee of \$25 would offset speaker cost.
- IV) Engineer "Jam Sessions" consisting of three or four of our talented local engineers to answer your questions or speak from their experience and knowledge on selected topics.
- V) Table Topics with each table at our general meeting having an engineer or vendor with expertise in a particular area of interest to our members. This would allow more members to be involved in Q & A.
- VI) BOMI Groups. A number of members studying together for the Systems Maintenance Technician/Administrator (SMT/SMA) designation given by the widely recognized Building Owners and Managers Institute. A bimonthly or monthly meeting to both encourage and question each other. Registration with BOMI is \$150. Cost of the SMT course is \$315; cost of the SMA course is \$395.

| Other Suggestions: | |
|--------------------|---------------------------------------|
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(Continued from page 2)

If you are fully insured (80% of the replacement value of your home), you may only have to pay the deductible, and your flood insurance policy may pay for most professional cleaning and reconstruction. Even if you are insured, the other sources of assistance can help with expenses that your insurance policy doesn't cover.

Voluntary Agencies. Private agencies such as the American Red Cross, Salvation Army, and church groups are usually on the scene during or right after a flood. These groups usually provide for immediate needs such as clothing, groceries, shelter, medical aid, and counseling. Some private organizations can sometimes help you restore your home. Sometimes volunteers help you clean up and rebuild, and services are usually free of charge. Emergency assistance is provided to people affected by disasters, whether or not the area has been declared a disaster. The Red Cross can also provide vouchers to purchase new clothing, groceries, essential medications, rent, bedding, essential furnishings, and other items to meet emergency needs. They can also provide cleanup kits. Contact your local Red Cross chapter for more information.

Businesses such as your local TV, radio and newspapers usually publicize contributions from private organizations;

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Systems



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you just need to call and apply. Some insurance companies, mortgage companies, or creditors may even delay your monthly payments.

Counseling programs give advice on crisis counseling, on everything from recovering from a disastrous flood to help with unemployment, food stamps, income taxes, insurance claims, legal issues, and veterans benefits.

Rebuild your home and make improvements that will help flood-proof your building or home from the next flood. Make it better this time; take definite action to protect your property. By doing this, you make it easier on your wallet for the next time. Use materials and proven methods that will minimize or prevent damage from future floods. You may even decide to build in a different location on your property. Check your elevation, new floodwalls or levees, or seal your building to keep water out.

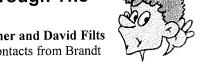
Contractor caution notes. Be cautious on contractor "special deals." Be sure you get the services and products you pay for. Do not sign a contract if you are being pressured by any salesperson. If you are asked to pay cash on the spot instead of a check made out to the contracting company, beware. A 30% down payment by check is reasonable. Inspect their work on a regular basis. Local building departments will want to inspect the electrical and plumbing lines before the walls are covered up.

The last step is preparing for the next flood. Protect yourself with flood insurance, a flood response plan, and community flood protection programs. It just may be likely your home will go through another flood, but preparing yourself, your family, and taking extensive measures will protect you and give you peace of mind. In addition, keep in mind that it takes only 6 inches of fast-moving water to sweep a person off their feet, and cars can float in about 2 feet of water. So protect yourself and your family, and remember, the first thing to take care of in a flood situation, is you and your family.

This information is published by the Federal Emergency Management Agency (FEMA) and the American Red Cross to help flooded property owners. It is designed to be easily copied. Permission to reproduce all or any section of this material is hereby granted and encouraged. *

Heard It Through The Grapevine

Ronnie Schaner and David Filts are the new contacts from Brandt Engineering.



Martin Schraub is the new member contact for Jones Lang LaSalle. *



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Charles H. Mikolajczyk, Jr., CBE Endeavor Real Estate Group 8000 IH 10 W, Suite 250 San Antonio, TX 78230

SAABE TIMES July Issue

Final Thought:

I like long walks, especially when they are taken by people who annoy me.

—Noel Coward

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Association Coordinator

(laurabray@braycommunications.com)

Membership Luncheon July 17, 2002

Time: 11:30 a.m.

Location: Old San Francisco Steakhouse Program: Topic to be Announced Sponsored by York International

Upcoming Luncheon: August 21, 2002

Sponsor: Holt Power Systems

The SAABE Times is edited by Laura Bray and printed monthly for the San Antonio Association of Building Engineers by:

