

INSPECTOR



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RISK MANAGEMENT: A CLEAR VISION

MAY 1-4, 2015 • HYATT REGENCY
SANTA CLARA, CALIFORNIA

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CHAIRMAN'S MESSAGE

STEVE JOHN, MCI, CHAIRMAN OF THE BOARD & STATE DIRECTOR

Wow! Did you see the lineup for our next Conference? I think it's one of the most incredible selections of speakers ever assembled at any conference, anywhere. How incredibly lucky we are to have such a dynamic speaker as Stan Luhr. Stan just happens to be my personal all-time favorite speaker. I don't care how experienced you are, Stan is going to challenge you and inspire you to take it to the next level. Even if you're the smartest person in the room, you're going to learn a lot listening to Stan and this is the first time in 10 years we have had the privilege of having him here to speak to us. Stan is perfect for the more experienced inspectors. His expertise as an expert witness is unparalleled. Whether you have ever had an interest in becoming an expert witness or just want to have a better handle on how to keep yourself out of court, Stan is the perfect speaker for you. I remember Stan from my early days over two decades ago when he was still doing home inspections before he started his successful consulting business and Quality Built program for home builders that went national. Stan brings a unique perspective to the conference that you don't want to miss. This alone makes the flight up north worthwhile. It could be a decade before we get him back again, so don't miss this one.

But that is just one of the incredible speakers we have lined up for you. We have Michael Casey who is everybody's favorite speaker, one of the most popular speakers anywhere in the nation and needs absolutely no introduction. He has agreed to speak three times this conference. Skip has two sessions being offered you don't want to miss. There are way too many more to mention here and I don't want to miss any of them. If it was up to me, the conference would be a full week so you would be able to hear every single speaker. I look at this line up and see a lot of difficult choices that need to be made.

Make your reservations now and come join us in beautiful Santa Clara on May 1st through the 3rd. Not only is this an opportunity for you to take your inspections to the next level but this is your opportunity to talk to your fellow inspectors and be part of this wonderful

community that is CREIA. This conference is intended and designed to help you make more money and if you don't start making more money after coming to this conference, it's your fault. I want to see every one of you there. Then stay a few extra hours on Sunday and go to your CREIA Board meeting and give all of us on the board a piece of your mind. I will give every one of you who would like an opportunity to address the board on any subject a few minutes to do just that. This is your CREIA, your board, and your opinion is important to us.

CREIA is on the move and we are moving forward. A dedicated group of your fellow members spent two days focusing on a sometimes painful and laborious examination of CREIA's strengths and weaknesses with a goal to prepare us for the future. We know we have some serious challenges but I am confident that we are now moving in the right direction. Everyone at the Strategic Planning Session came to the realization that we need to grow our membership and strengthen our chapters. CREIA is founded on the premise that we all come together for our mutual benefit and by sharing and pooling our expertise we are all enriched and better off.

We may not be the marketing cooperative that some members think we should be. What we are, at our essence, is an association that believes that through our collective efforts we can strengthen this profession to the benefit of every member. We share our expertise freely in the firm belief that this will not only benefit us collectively but each one of us individually. We believe that the best way to improve our service to our clients is through continuing education, the sharing of ideas and improving the quality of home inspections.

The more our chapters grow, the more every one of us will get out of our association with our fellow inspector members. Larger chapters allow for more sharing of information, new perspectives, better speakers, and stronger chapter meetings. You never know when that new member is going to share a bit of wisdom

that keeps you out of court or takes you to the next level. CREIA is predicated on the ideal of sharing knowledge for the benefit of each of us. Consequently, we are going to be dedicated to the twin goals of growing our membership and strengthening our chapters and your state board will be focused on doing just that. Furthermore, if you have an idea to help implement those goals, let us know.

Please support your association in any way you can. The best way to support your local chapter is simply to go the meetings. Every person's participation provides an element of support which build and reinforce the chapter. If you're not happy with the speakers, suggest new topics or ask a contractor you like to make a presentation or even become an affiliate. Make a presentation yourself. It's the participation of each of us that makes this association what it is. The more you put in the more you will get out. I guarantee it.

Please take the time to read all the articles and give us and the authors your feedback. Think about contributing an article yourself for the next issue and you will get CEC credit for the effort. I particularly like the article on the California Business and Professions Code which should help you to understand your legal liability under California law. (Disclaimer, I wrote it.)

Sincerely,
Steve John

IN MEMORY OF ROGER ROBINSON

BY DOUGLAS HANSEN

Looking back on 2014, I am sure we will all remember our own personal passages and milestones of our own and our loved ones, and most of all, that it was the year we lost Roger.

Roger Robinson's impact on the inspection world has been stated many times, and yet it is worth repeating. As Michael Brady stated at the memorial, inspectors in the Bay Area are not the same as in other parts of the country. A consumer here can find someone who is not just professional, thorough, and conscientious; they can also choose from a number of folks who have a deep and personal commitment to their customers' safety and understanding of the property they are buying. Roger Robinson is the cause of the Bay Area having such an abundance of experienced professionals. For over three decades, he trained other inspectors and led by example. At least half the top-notch inspectors in the Bay Area at one time or another worked for or with Roger.

He came into the inspection business at its inception, at a time when entrepreneurs were first learning how to leverage the use of computers to create multi-inspector firms. For a time, Roger had numerous employees, both as inspectors and support staff, yet the day-to-day running of a business was not really his strongest suit. He much more enjoyed teaching and creating systems that others could use. I remember once going to the Star offices in Oakland, in one of its later incarnations, and being surprised by the number of people that worked there. Roger explained to me that by then he didn't really see Star as a hierarchy designed to serve him; it was instead a user's group where each person could create a role that suited their own talents and needs. In one sense, this was a way in which his passion to create systems and structures overrode his own business sense. A lot of financial opportunities might have slipped through Roger's fingers, but he succeeded where it counted the most, and that was with the people that he impacted. That extends also to the customers. We will never know the extent of how much good he did in this world, of how many people did NOT get injured on non-safety glass thanks to Roger, of how many people did NOT have significant damage in an earthquake, or any of the other quiet ways in which home inspectors actually save lives.

His personal impact on me was profound. As a couple of survivors of the sixties, Roger and I had a lot in common, and appreciated many of the same things in music, art, and travel. Early on in our relationship, he challenged me to clean up the everyday language that I used, which at the time was laced with hefty doses of profanity, put-downs of others, and a general layer of cynicism about the world. He insisted that if you take those words out of your speech, you will also take that darkness off

of your heart. I have done my best ever since to follow his advice, and can attest that his influence has made a profound difference in my life.

Sometimes he did take it to extremes, such as when he challenged me to avoid the word "but" in written and oral speech. I found that as difficult as trying to adhere to the Japanese notion of avoiding the word "no." In these ideas he was greatly influenced by Joan. After her passing, I saw a small plaque on the wall of their house, on which was written: Speak only of the well from which you would drink. Since then, that phrase has adorned the walls or desk of my office, and it is something I try to live by, as I know Roger did as well.

When conversations would take a dark or negative turn, Roger would simply refuse to participate. He focused on positives and seemed to be absolutely without a need to hurt others. Roger enjoyed what he was doing and did not want to change, but time was catching up with him and he refused to acknowledge the warning, as he got older. The first indication of the gravity of Roger's condition came when he entered the hospital in late summer, and he went into a comatose state. That scary time forced us all to envision the possibility of a world without Roger in it. As sad as the news was on October 2, at least it didn't come as a complete shock. Now that he has joined the ancestors, the part I will always choose to remember, more than the creativity or professional accomplishments, is the gentleness and empathy that he embodied.



Deck Inspection, Prevention and Maintenance: Protecting Decks from the Elements

Failing decks are a common problem for property owners and managers. When decks are inadequately waterproofed and maintained, rain and moisture can cause severe damage. Repairs are not only costly but can also become a huge disturbance to tenants and owners.

What do you look for during a deck inspection? Many tell-tale indicators exist and must be attended to quickly before further damage occurs.

CHECK SLOPING

When evaluating floating decks, the proper slope should be no less than $\frac{1}{4}$ " per foot. An obvious sign of improper sloping is the puddling of water on the deck's surface. When a deck is properly sloped, water from moisture or spills should run directly to the drains.

INSPECT DOOR THRESHOLDS

Door thresholds built too close to the deck are a common problem. All door thresholds should be approximately 1"-1.5" above the deck. Also, make sure to look for penetrations in the threshold such as nails, screws or gaps under the door threshold.

EXAMINE FLASHING

Check for good adhesion of the flashing on the outside edges of the deck. Improper flashing at the edges will show signs of rusting and

cracking. Survey flashing at the base of walls where it meets the deck. Check for peeling or delamination of the coating. Also be aware that some properties were built with NO flashing at all. Be assured deck failure will occur at some point in time.

CHECK POST INSTALLATION

Posts for deck railings should be mounted on the outside of the deck. Posts should not be bolted into the top of the deck but if so, check for rusting of the post and hairline cracks.

SURVEY EXISTING DRAINS

Professionally installed waterproof deck coatings around the drain should remain adhered to the deck. To be sure, remove drain covers and check for rusting and cracking. Check underneath the deck for improper drainage and watermarks. Thunderbird drains are recommended.

OBSERVE SCUPPERS

Scuppers should be adhered to the waterproofing system and sloped properly. Puddling at the scupper could mean problems.

STUDY STUCCO AT WALLS

A clearance of stucco stop should be at least 2" off the deck (higher). Make sure there is FHA at the walls and that the stucco is properly ventilated.

Other common issues found with decks include deck surfaces with tile and/or carpet and the use of rubber mats.

DECKS WITH TILE

Grout line cracks in tile causes leakage and ultimately deck damage. A total removal of tile is needed when any significant problems occur.

DECKS WITH CARPET

Carpet on decks is not recommended in the industry due to moisture problems. Carpet glue will adhere to the deck, slowing down drainage.

RUBBER MATS

Rubber mats can peel the coating from the deck and are not recommended.

The foremost consideration for waterproof decking is to do it right the first time. When owners or property managers try to save money, it can cost more money in the end. Avoid expensive mistakes by choosing the right products and a professional, qualified installer to do the job right. The result will be an attractive deck that will stand up to the elements year after year.

For assistance with inspections and more comprehensive evaluations of decks, contact Life Deck Coating Installations at 619.262.8600 or visit www.lifedeck.com.



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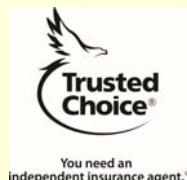
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CHAPTER LEADERS: KEEP US UP TO DATE!

As well, if you are a Chapter Leaders and have updated Chapter information—please send us the details! We want to make sure your events and Chapter leaders are up-to-date on the CREIA Website, as well, we want to make sure the Chapter Leaders and Chapter Presidents are added to the Chapter Leaders' and Chapter Presidents' Listserv to receive important updates!



CREIA MEMBERS IN THE COMMUNITY: **GIVING BACK**

On January 8th, 2015 the NSD/TV Chapter presented to Steve Roseberry over 60 lbs. of food collected at our Christmas party last year. Steve was very appreciative and said the food would go to a pantry that helps feed those veterans who were left behind and are in need of provisions.

On Saturday, January 17th, 2015 three CREIA members spent the day volunteering for the Wounded Warrior Home in Vista. Tom Terry, Steve Roseberry and Jeff Ermis from District 8, North San Diego, Temecula Valley Chapter helping with the new Wounded Warrior Home spear headed by Steve Roseberry. Steve and his wife Mia are big advocates for the program that provides homes for veterans who suffer from TBI (Traumatic Brain Injury) PTS (Post-Traumatic Stress). While Steve was directing the 45 or so volunteers who showed up that day Jeff and Tom spent most of the time building a 50 foot long 4 foot high retaining wall, with the help of local young boys. Giving back to those who have given up so much for us is well-spent time and effort. Thanks to Steve and Mia Roseberry who sacrifice their time so veterans like these can find a safe place to live.

*Jeff Ermis, Excel Inspections, Certified CREIA Inspector,
North San Diego/Temecula Valley 2014-2015 CREIA Chapter President*



CONFERENCE REGISTRATION

EARLY BIRD DEADLINE APRIL 14, 2015



2015 CREIA CONFERENCE

MAY 1-4, 2015 • HYATT SANTA CLARA



REGISTRATION TYPE	MEMBER		NON-MEMBER	
	ON OR BEFORE 4/14/15		AFTER 4/14/15	
FULL REGISTRATION	\$365	\$495	\$405	\$535
FULL/JOIN & REGISTER	N/A	\$465	N/A	\$505
ONE DAY FRIDAY 5/1	\$135	\$185	\$155	\$205
ONE DAY SATURDAY 5/2	\$165	\$215	\$185	\$235
ONE DAY SUNDAY 5/3	\$100	\$130	\$120	\$150
GUEST REGISTRATION	\$95	\$95	\$95	\$95
GOLF	\$60	N/A	\$60	N/A

REGISTRANT INFORMATION

Please list name as you would like it to appear on your name badge: _____

First Name _____ Last Name _____

CREIA Member ☐ Yes ☐ No Chapter _____

Company _____

Mailing Address _____ City _____ State _____

Telephone Number _____ Email Address _____

Special Accommodations or Dietary Restrictions _____

REGISTRATION TYPE:

- ☐ Full Registration
- ☐ Full/Join & Register
- ☐ One Day Friday 5/1
- ☐ One Day Saturday 5/2
- ☐ One Day Sunday 5/3
- ☐ Guest Registration
- ☐ Golf

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Registration will not be confirmed until payment is received. See creia.org/creia-annual-conference for cancellation policy. SIGN-UP online at www.creia.org (easy and 100% secure) or mail with payment information to: CREIA 2015 Convention • 65 Enterprise • Aliso Viejo, CA 92656.

A NOTE FROM THE CONFERENCE CHAIR

I'd like to personally invite you to CREIA's Annual Conference, Risk Management: A Clear Vision to be held May 1-4, 2015 at the Hyatt Regency in Santa Clara, California. Home inspection is an incredibly demanding and knowledge-intensive profession and CREIA is dedicated to keeping members up-to-date and on top of the profession. It's an exciting time for home inspectors as we continue to learn and adapt to new technology and keep motivated in business development. We have turned to this year's presenters to offer several workshops to do just that!

Members are encouraged to come together to meet informally, to stimulate the exchange of ideas, to discuss with colleagues challenges in the industry, stay on the edge of what's happening in the field, as well as to gain continuing education units. Come meet us in Santa Clara!

Sincerely,

Sam Jabuka, Chair
CREIA Annual Conference Committee

CONFERENCE AT-A-GLANCE *

*SUBJECT TO CHANGE

FRIDAY, MAY 1, 2015

7:00 am to 12:00 pm	CREIA GOLF TOURNAMENT, SANTA CLARA GOLF COURSE
7:00 am to 5:00 pm	REGISTRATION
7:00 am to 8:00 am	CONTINENTAL BREAKFAST
7:00 am to 5:00 pm	TRADESHOW
8:00 am to 5:00 pm	Neal Muckler , "IAPMO Plumbing" Part 1
8:00 am to 12:00 pm	Joseph Denneker , "Why Effective Communication is a Home Owners' Best Defense"
8:00 am to 10:00 am	Bill Fabian , "Infrared and Off-Site Inspection with Infrared Cameras"
9:00 am to 5:00 pm	CREIA STORE OPEN
10:00 am to 10:30 am	BREAK
10:30 am to 12:00 pm	Dominic Maricic , "Inspection Software"
12:00 pm to 1:00 pm	LUNCH WITH EXHIBITORS
1:30 pm to 3:00 pm	CONCURRENT BREAKOUT SESSIONS: • Mike Casey , "Inspecting Electrical Panels" • Skip Walker , "PT Lumber and Corrosion: Unintended Consequences"
3:00 pm to 3:30 pm	BREAK
3:30 pm to 5:00 pm	CONCURRENT BREAKOUT SESSIONS • Joey Lee , "Plumbing/Cross Connections" • Bob Pearson , "Risk Management Myths and Facts"

SATURDAY, MAY 2, 2015

7:00 am to 8:00 am	CONTINENTAL BREAKFAST
7:30 am to 5:00 pm	REGISTRATION
7:30 am to 6:00 pm	TRADESHOW
7:30 am to 5:00 pm	CREIA STORE OPEN
8:00 am to 8:30 am	CHAIRMAN'S WELCOME MESSAGE
8:30 am to 5:00 pm	Neal Muckler , "IAPMO Plumbing" Part 2
8:30 am to 12:00 pm	Mike Casey & David Madariaga , "Risk Reduction/Report Writing"
8:30 am to 12:00 pm	Stan Luhr , "Advanced Inspection Investigations"
10:00 am to 10:30 am	BREAK
12:00 pm to 1:00 pm	AWARDS LUNCH AND GENERAL MEETING
1:30 pm to 3:00 pm	CONCURRENT BREAKOUT SESSIONS • Abe Simantob & Massood Gaskari , "Geotechnical Issues and the Home Inspector" • Mike Roberts , "Locating Signs of Water Intrusion Around Doors and Windows"
3:00 pm to 3:30 pm	BREAK
3:30 pm to 5:00 pm	CONCURRENT BREAKOUT SESSIONS • Dan Huber , "Connected Technology for Today's Inspector" • Nathan Thornberry , "The Role Mold Plays in a Real Estate Transaction"
5:00 pm to 7:00 pm	MEET AND GREET RECEPTION

SUNDAY, MAY 3, 2015

7:30 am to 12:00 pm	REGISTRATION
7:30 am to 8:30 am	CONTINENTAL BREAKFAST
7:30 am to 11:00 am	CREIA STORE OPEN
8:30 am to 10:00 am	CONCURRENT BREAKOUT SESSIONS <ul style="list-style-type: none"> • Skip Walker, <i>"Prefabricated Fireplace Inspections"</i> • Nathan Thornberry, <i>"Frequency and Causes of Mechanical Malfunctions in HVAC, Electrical, Plumbing & Appliance Systems"</i>
10:00 am to 10:30 am	BREAK WITH EXHIBITORS
10:30 am to 12:00 pm	CONCURRENT BREAKOUT SESSIONS <ul style="list-style-type: none"> • Mike Casey, <i>"Fundamentals of Fuel/Gas Appliance Venting"</i> • Romeo Durscher, <i>"2015: Year of the Drone"</i>
12:00 pm to 1:00 pm	LUNCH ON OWN
1:00 pm to 5:00 pm	CREIA BOARD OF DIRECTORS MEETING

MONDAY, MAY 4, 2015

7:30 am to 8:00 am	CONTINENTAL BREAKFAST
8:00 am to 3:00 pm	LEADERSHIP DAY
12:00 pm to 1:00 pm	LUNCH
3:30 pm to 5:30 pm	PATH TO SUCCESS TRAINING

CECs

Earn up to a 22.5 CECs, which are also applicable towards ASHI and IAPMO certification/requirements. Attend the CREIA Conference and be removed from the CEC audit list for your new calendar renewal.

CONFERENCE FEES

EARLY BIRD DEADLINE APRIL 14, 2015

REGISTRATION TYPE	MEMBER	NON-MEMBER	MEMBER	NON-MEMBER
	On or Before 4/14/15		After 4/14/15	
Full Registration	\$365	\$495	\$405	\$535
Full/Join & Register	N/A	\$465	N/A	\$505
One Day Friday 5/1	\$135	\$185	\$155	\$205
One Day Sat. 5/2	\$165	\$215	\$185	\$235
One Day Sun. 5/3	\$100	\$135	\$120	\$150
Guest Registration	\$95	\$95	\$95	\$95
Golf	\$60	N/A	\$60	N/A
IAPMO Materials*				
*Mandatory if taking the IAPMO Plumbing course with Neal Muckler on Friday and Saturday	\$165 pre-order	\$165 pre-order	\$180 at door	\$180 at door

NOTES REGARDING REGISTRATION

Full Conference: This category includes Tradeshow and Educational Sessions; Continental Breakfasts on Friday, Saturday and Sunday; Lunch with Exhibitors on Friday; Awards Lunch and General Meeting on Saturday; (Does not include the IAPMO Plumbing Materials.)

Guest Registration: Guest must accompany a CREIA member. Fee covers admission to the exhibit hall, all meal functions. Does not include admission to the educational events, syllabus or CEC credit.

Friday/Saturday/Sunday Daily Registration: This category includes Tradeshow, all Educational Sessions, Meals, Awards events and receptions—specifically for the day of registration ONLY! (Does not include the IAPMO Plumbing materials or Educational sessions).

Special Accommodations: Facilities are accessible to persons with disabilities. If you require special accommodation and plan to attend the CREIA Conference, please contact the CREIA office at 949-715-1768 or info@creia.org. Please allow as much advance notice possible to ensure we have ample time to meet your needs.

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HOTEL INFORMATION



IMPORTANT DATES

Discounted Registration:

Register at <http://www.creia.org>
on or before April 14, 2015.

Hotel Room Conference Rate:

Available through April 9, 2015
or until block is sold out.

Cancellation Policy:

Registration cancellations will be
accepted until April 15, 2015. A \$50
administrative fee will be deducted.
No refund of any registration fees
will be given if cancellation notice is
received after April 15, 2015.

FOR MORE INFORMATION,

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To reserve your room: Call 408-200-1234 or log onto CREIA's
website at www.creia.org, click on the Conference page, and
register online for the conference and your hotel room!

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save money on your Conference fee. Go to www.creia.org,
register for the Conference and choose the "Register & Join
CREIA" option!

THE VALUE OF TOOLBOX TRAINING EVENTS

BY BOB WAYSACK, CCI

Membership in CREIA offers many benefits but among the greatest is Toolbox Training. Toolboxes generally take place in the field with a very practical examination of a particular subject relating to some aspect of construction. Our chapter, North County San Diego/Temecula Valley (NCTV) in conjunction with San Diego, tries to schedule at least 4 Toolboxes each year. The fees are usually very nominal and CEUs range between 4 and 6 credits depending on length of training. These trainings are a great time to increase our knowledge of a particular subject and build relationships with our peers and industry experts.

One example, from last year, was a Toolbox on Balconies and Decks. This was a chance to learn hands-on from one of the most experienced structural engineers in our area, Massood Gaskari, P.E., of Private Eyes Engineering. This Toolbox will covered structural engineering concepts and code requirements for decks and balconies. We learned the common “red flags” found during inspections and discussed various ways to report defects. Another one was a 6-hour Toolbox with Mike Casey that covered a history of alternating current and inspection of electric panel boards, exclusively. We discussed modalities and evidences of failure and/or improper installations as well as reviewing many actual case studies. This session reviewed installations from 30 amp, 120 volt to modern 400 amp 120/240 volt with some discussion on three-phase. Also covered were sub-panels and grounded conductor isolation. Attendees learned more about Zinsco, FPE and others.

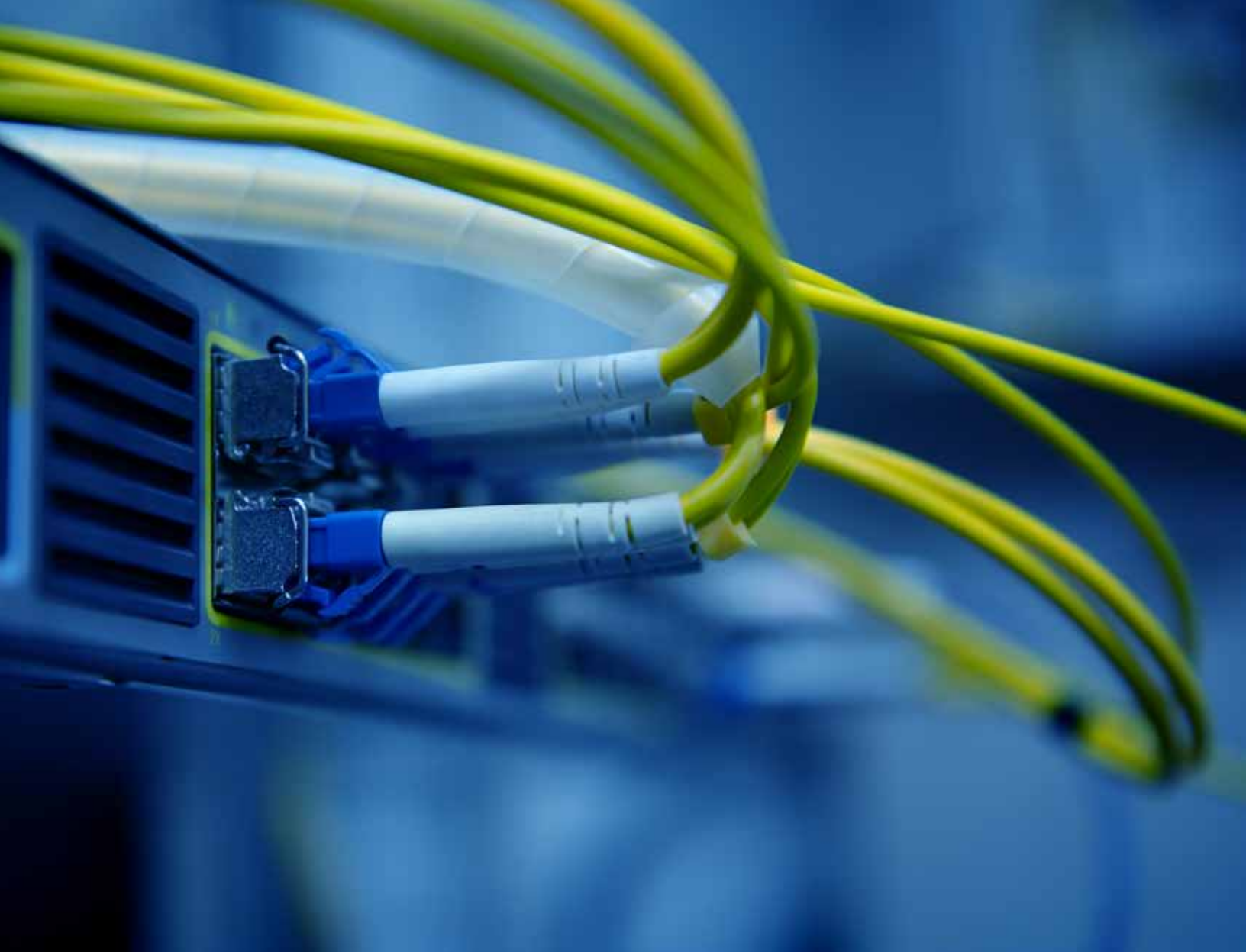
Feedback from our members is what matters most and determines future topics and also helps us improve training formats. Pierre Coulombe, Blue Ribbon Home Inspections, and current NCTV Chapter Secretary, stated, “I cannot think of any Toolbox that I have attended and didn’t get a lot from it. The experts used in the toolboxes were willing to share all they knew about the topics, the information was timely and beneficial to even the most seasoned inspector. The Toolboxes also tend to give us more the latest information in the subject areas. Craig Russell, Russco Home Inspection, and 2013-2014 Chapter Secretary, says, “Toolbox events are an integral part of the educational process for CREIA candidates as well as continuing education for CREIA certified inspectors. The NCTV chapter is extremely fortunate to have some of the sharpest home inspectors in the business, thereby providing the candidate the opportunity to learn hands on from the best in the business. For the certified inspector Iron sharpens Iron we are never done learning and improving our profession. For me personally tool box events have been a unique and invaluable part of my education on many different levels and subjects. There aren’t many professions that freely share years of experience and information like ours, so take advantage of those tool box events.”



In discussion for this coming year is a Toolbox regarding Simpson Strong-Ties, structural products that strengthen the construction of a home, and a joint Toolbox with San Diego to learn about Life Deck, manufacturer of concrete & epoxy coatings.

Toolboxes, along with pre-meeting education and annual conferences, provide a variety of educational opportunities to obtain the 30 CEU credits needed each year. As CREIA Inspectors, it is important for us to continually learn and grow professionally. This commitment is what helps to separate us from other inspectors that are not part of this association.

*Bob Wysack, NCTV President 2013-2014
Inspect-It 1st Property Inspection*



Structured Media Panels, Low Voltage Data and Communication Equipment

BY BRET HUSTED CCI, ACI, CSLB LIC 551626 B, C10, C36, ICC, RESIDENTIAL COMBINATION INSPECTOR

I know... I know... CREIA standards do not specify inspection of low voltage systems, thank my lucky stars, but you know that time is coming. In case you were not aware, we live in an era of information explosion. How we receive and distribute that information, like it or not, will be part of our business in no time.

In the past IT guys were a part of our office world and not in our home. Now, there are a significantly growing number of increasingly

automated and smart homes. Inspectors have to figure out how the technology works and explain its operation to buyers. It doesn't look good when you can't explain to your client how the lights go on or what that box on the wall does. I have inspected homes with automated blinds, lighting, theater systems, and hybrid heating. Heck, I hear you can even control your garage door from another country for less than fifty bucks. Usually such specialty devices are not labeled and frustration is involved when

trying to test new 'high end' equipment. You feel like you may need to use a lifeline just to get the oven to turn on.

THE BASICS:

Most systems operate via a radio signal or a wired connection. The systems may require a central hub and service established through an access provider via an IP address. Wireless

CONTINUED ON PAGE 15

CONTINUED FROM PAGE 14

systems are clearly emerging as the future of automation platforms. Wireless, however is slower than cable-wired systems and does not work well with complex real-time applications.

Connected systems utilize cable designed specifically to carry large amounts of data either by magnetic charge or an optical light signal. Bandwidth is the quantity of accessible avenues in which data travels. Cable is either twisted pair as in Category 6e or coaxial as in CATV (RJ-11). This cable is primarily copper, although occasionally aluminum, silver, or gold may also be used. Fiber optic cable uses glass for signal transmission. Fiber optic cable provides the greatest bandwidth as there are an infinite number of light colors which can be used to create a signal while magnetic signals passing through metal wire are limited to pulses. This is why Cat4 wire has gone to Cat6. Electrical signals traveling through the wire are lost due to magnetic interferences in the cable. By twisting wire in the cable (twisted pair) magnetic interference is lessened and more data can travel across the wire in a shorter time. Staggering of the twisting further aids in reduction of interference. This is why the old two pair red/green-yellow/black phone wire many of us grew up with is now as obsolete as knob and tube in electrical systems. The quest to shorten data transfer time is similar to the search for the Holy Grail.

HOME DISTRIBUTION:

Once service is established to the home it must be distributed. Simple, yes? – Well, not that simple. Distribution is made through a panel similar to an electrical breaker box without the breakers. A central hub (structured media panel) is installed and services are distributed through the home from this panel. Typically each habited room should be provided with a coaxial cable outlet and two to four data terminals. The media distribution center is often found in the master bedroom closet and usually not too far from the security alarm system. Looking at a well-designed and integrated panel is a joy to this particular inspector. Some of these systems are truly a work of art; however, most are not.

The panel should have a basic punch down block for phone and data lines, a coaxial cable

connection hub, a coaxial cable amplifier, and an electrical receptacle mounted at the frame of the cabinet. Line voltage wiring should not be in the cabinet but the receptacle plug face should open to the interior of the box. Newer systems may have a wireless router also in the box. All wires should be labeled and installed at their respective locations in the panel. Phone systems are on a separate punch down block from data distribution. If the cables are not connected to anything, then the owner will have to hire someone to do that in order to use all the ports in the house. It would be like putting all of the wiring for light switches in the wall, but not connecting them because it would have taken too much of the contractor's time.

INTEGRATION:

Integration and automation is on the horizon. The day when we can simply walk up to the front door and say “let me in, feed the dog, and make my dinner” are not far away. The “wired” systems of the 90's are now in many ways obsolete and what builder's are installing now likely won't be relevant in 10 years. Most of us can't live without Wi-Fi now and haven't used a phone jack for a phone in six years. I previously had clients ask, “Are there phone jacks?” Not so much anymore—now it's “Is there high speed Internet?” –as they search through the empty air space in the rooms.

Wi-Fi appliance integration is made possible by harnessing radio signals in the home to activate and deactivate devices. Some systems use older hard-wired relays to provide functionality. A simple remote control can activate a wireless relay in a light switch for instance, or ceiling fan to make it go on or off. These signals can also be produced by software and transmitters at a computer. The computer can even be controlled in turn by a smartphone from a remote location. Signals can be complex and allow for multiple devices to operate simultaneously or for complex appliance control. The recent craze for Nest™ thermostats is a good example. As integrated circuits become cheaper and wireless technology becomes more advanced this trend will proliferate. A future where there are no switch plates and no handles on fixtures or appliances is potentially foreseeable. I now have a robot vacuum that tells me when its going to do whatever it is it does and when I'm at the plumbing supply house all the \$1,000

toilets lift their lids as I walk by in salute.

Inspecting these systems is a challenge. Everything changes and nothing is intuitive when it comes to how these things work. Understanding the basics is key to having a comfort level when inspecting these systems. Knowing how it works gives the inspector a real life way of explaining the operation to a prospective buyer who hasn't had experience with these devices.

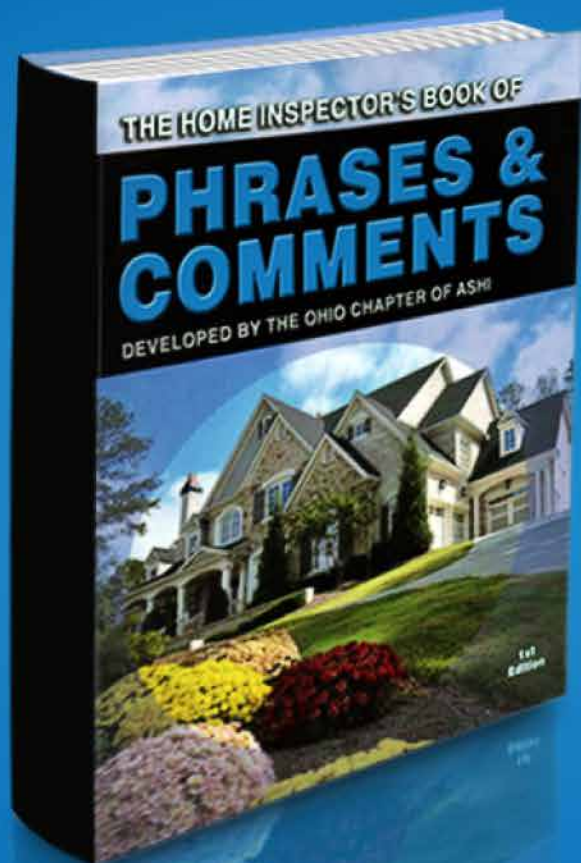
LASTLY:

Keep an eye out for low voltage equipment. Make sure things look right, tight, and functional. Make sure that all the connections are made in the distribution panel. Most homeowner's will be thankful that you took a peek at these components even though it is not officially part of our standards of practice—yet.

Persons interested in expanding their inspection services can benefit from training in home theater installation and integrated wire management classes. Testing of connections, augmentation, and repair of these systems is a growing service industry.

Disclaimer – Just as Bob Barker, I also do not reside on Mount Olympus (closer to Oakland actually) and welcome any constructive commentary.

About the Author: Bret Husted is located in San Francisco and inspects many older buildings - (1850 - 1930) as well as modern construction (1940 - present). Bret is a licensed and practicing General Contractor, Electrical Contractor, and Plumbing Contractor. He is an ASHI (ACI) and CREIA (CCI) member (since 2004); ICC certified Residential Combination Dwelling Inspector; certified Level 1 Thermographer; Licensed branch 3 Structural Pest Control Operator, and ACE (Associate Certified Entomologist). Bret enjoys several 1/2, full marathons and triathlons a year.



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Window Leakage Claims Frustrate Builders

BY STAN LUHR



Window leakage claims continue to plague homeowners and frustrate builders, despite wide adoption of more expensive self-adhered flashing (SAF) products specifically designed to prevent such leakage, says a leading forensic investigator and building expert.

The problem isn't with the new products flexibility or adhesive qualities, according to Stan Luhr, CEO of Utah-based AxisPointe, a risk management services provider. Luhr is a forensic construction expert who has investigated thousands of window failures across the country, and claims that installers place too much faith on the products. "It's all in how the products are being installed," says Luhr.

Dozens of SAF products are on the market, including brands from Grace, DuPont, Fortifiber, Protecto Wrap and others. Luhr says the products work well when installed properly, but other factors must be considered when trying to make a building weatherproof, particularly in recessed window designs common in the west.

"A recessed window should be treated like a roof with a window opening very close to the deck surface, and that is why it is problematic for some builders," Luhr said. Luhr's forensic business includes testing windows and solving problems for builders and insurers before they get out of hand. When problems go unresolved, litigation often follows, leading to frustrated homeowners and expensive lawyer battles.

Luhr claims that most leaks occur due to the following reasons, which can be easily corrected during installation:

IMPROPER CLEARANCE TO WINDOW

Recessed windows, particularly in stucco designs, often lack sufficient room to allow the SAF products to terminate vertically, above the finished stucco or brick sill. This results in a 'bathtub effect', trapping water in the system where it finds its way through the slightest hole and into the building. Luhr recommends elevating the rough windowsill at least 4-inches above the rough opening to provide for proper slope of the membrane and clearance to the windowsill product. Window offsets less

than 6-inches should require the window to be installed after the sill is waterproofed.

LEAKAGE AT FLASHING PRODUCT LAP JOINTS

SAF products stick together very well, giving a false impression that a seam is entirely waterproof when it isn't. Luhr says that the primary leakage is at the recessed windowsill, where multiple pieces are joined together or when wrinkles occur at splices. When products are installed at inside corners and 90-degree joints, small openings can occur which allow water to travel through.

COMPLEX INSIDE CORNERS

Many popular SAF products do not flex and stretch around three-dimensional corners, requiring the SAF to be cut and spliced. At inside recessed corners, Luhr insists that a folded corner—not a spliced corner—should be installed. Folded corners are created by folding the product into the dimensional shape, which results in a completely waterproof joint.

Inside the wall cavity, a flexible flashing membrane joint leaks into the building cavity. Inside 90-degree corners often leak here when the top membrane is not firmly pressed into the corner.



OUTSIDE CORNERS

SAF products must be cut and spliced to lay flat, creating a pinhole where no protection exists. Luhr says that despite manufacturers suggesting use of a corner piece (often called a "bowtie"), leakage still occurs. Luhr prefers products that can completely cover the outside corner, such as DuPont's FlexWrap™ which stretches and can be installed around corners without cutting.



Splices lead to failure. Inside corners should be folded, not cut and spliced, to provide a leak-free joint. See. Sequence below.



Outside corners need additional waterproofing to eliminate a pinhole leak, installed prior to the SAF membrane. This non-reinforced SAF product contours to the complex corner, which will be covered with a reinforced SAF membrane.



Inside corners can be folded instead of cut to eliminate leads, as shown here. The next SAF membrane will cover the jamb and extend over this fold, creating a waterproof joint.

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INADEQUATE SLOPE AT SILLS

SAF products are considered waterproof when perfectly installed, but few installations are perfect. Luhr recommends providing positive slope under the flashings to promote rapid drying and movement of water. The minimum recommended slope is ½-inch per foot to keep water from ponding within the system. For level sills, perfection is required.



This multi-million dollar window failure affected a seniors' care facility. Recessed window openings had reversed slope towards the interior, and missing waterproof components led to this failure.

THE SELF-SEALING MYTH

In Luhr's investigations of thousands of windows, he concludes that SAF products cannot be trusted to self-seal around fasteners used to secure lath and other components. "We would never allow hundreds of nails to penetrate a built-up roof system, which is 10 times thicker than these SAF products," Luhr said. "Why do we allow lath fasteners on the flat portions of recessed sills?" He recommends prohibiting all fasteners on the horizontal portion, securing the lath at least 2-inches above the rough sill on the vertical sides. Luhr argues that stucco routinely spans studs up to 24-inches apart, and there is no need to fasten lath that is only spanning a few inches horizontally.

MISSING BACKING

"SAF products do not seal around penetrations unless the fastener is secured into solid backing where it cannot move," says Luhr, who adds that he often proves this simply by pushing fasteners into the SAF products and filling with water to watch them leak.



Waterproof membranes require solid backing to provide support for the membrane.

"Recessed windows should be treated like they are mini-roof systems, since water doesn't know the difference between a horizontal stucco shelf and a flat roof," Luhr said. "Yet we

think because they are on a wall, we don't have to take the same care of providing backing, slope and waterproofing as we do on a roof—and that is where we are going wrong."

Luhr admits that installing SAF products is complicated. He has provided architects with a sequence of details to illustrate his installation method that has proven successful with his clients. "An even better solution is to transition to liquid membranes that incorporate a reinforcing scrim," but Luhr says, "These are just coming into the market place and few builders seem comfortable smearing a sour cream consistency product on their recessed framing." Liquid membranes will eliminate splicing and seam leaks, and can be more easily inspected than multiple flashing pieces for integrity.

Luhr prompted manufacturers to develop liquid membranes and tested several formulations to help create a product that builders can rely on that is easily applied and cheaper to install. Recently ProtectoWrap and DuPont have announced liquid membrane products and Luhr believes the market will transition to liquid membrane flashing once builders recognize the benefits, cost savings and risk reduction.



New membrane prototypes being tested in 2007 in our test facility.

What can builders do to prevent leakage? Consider the following if recessed window openings are planned on your project:

- Be sure to detail the installation, product and sequence so that everyone is on board with the installation method
- Build a full scale mock-up and water test the window, particularly for new trade partners or if new products are considered
- Use only one manufacturer's brand—don't intermix flashing systems and components
- Verify that the products are compatible with the window manufacturer's guidelines
- Provide sufficient room between the window fin and framing
- Prohibit lath fasteners on any non-vertical surfaces, even when good slope exists
- Consider the use of reinforced mesh and liquid membrane systems to reduce defects caused by miss-laps, wrinkles and complex corner breaches.

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NAME THAT DEFECT...

What's wrong with this picture? If you can correctly identify at least five defects that are clearly represented in this photo, we'll send you a Certificate of Building Knowledge worthy of framing!



About the Author: Stan Luhr is a forensic construction expert with over 30 years of experience in the construction industry. As a forensic expert Mr. Luhr has completed over 4,000 litigation claims ranging up to multi-billion dollar product defect cases. In 1994 he developed the industry's first computerized field QA systems, which eventually became the benchmark for the construction industry. Since then, Mr. Luhr's Quality and risk management processes have been successfully used on over 430,000 homes and commercial buildings, reducing construction defects by over \$9 billion. A nationally recognized trainer, Mr. Luhr has lectured at hundreds of educational conferences including NAHB, PCBC, IRMI, ASQ, Benchmark, & EEBA regarding construction quality, litigation and risk management. He joined AxisPointe in 2011 and serves as the company's CEO.



LESSONS IN RISK MANAGEMENT: IS IT SEPTIC OR SEWER?

BY MICHAEL CASEY, ACI, MCI, CNCS

I often see in home inspection reports the identification of sewer disposal as “municipal” or “city”, or as “onsite septic”. I also have worked on many claims wherein the home was found to be on septic after identified as municipal by the inspector. Many times the inspector says he/she assumed city sewer due to the neighborhood, or other visual factors. Sometimes the sewer or septic determination is followed by the information source, such as property profile, or similar, which could be wrong.

The CREIA Standards of Practice, section III-A-4 specifically exclude any systems that are underground. ASHI SOP is more precise and states “the inspector is not required to determine whether sewage disposal are public or private.” There was a reason for these exclusions; sometimes you just can’t tell without intrusive inspection, such as sewer camera or dig-up. Connecting a house that is on septic to municipal sewer is expensive. I’ve seen some run \$50,000 or more.

When the inspector identifies the sewage disposal as municipal in a report, regardless of whether or not the information source is cited, the inspector is now on the hook for something outside of scope, and most likely excluded in the inspector’s contract (especially if the inspector uses the CREIA Standard Contract, which I recommend), because the inspector chose to include the information in the report.

Many of the septic tank - not municipal sewer claims I have been retained on are in areas where you would expect municipal sewer – however, you don’t know if it is hooked up. I’ve seen cases where the septic tank is in the front yard, still in use, and the outlet pipe is connected to municipal sewer instead of on-site leaching system. So this house was on both!

My recommendation regarding identifying the house as on municipal sewer or onsite disposal – don’t do it. It’s beyond scope and not required – plus the risk is not worth it. If you must include a comment, I would write sewer or septic – not determined; inquire with seller or public works engineering department. This way you put the client on notice it was not determined, and to take action.

I will be discussing more risk management techniques, along with several very experienced inspector defense attorneys at the upcoming CREIA Conference in May – hope to see you there!

About the Author: Michael Casey, ACI, MCI, CNCS is the principal of Michael Casey & Associates and Director of Education with Home Inspection University. Both firms are CREIA Premier Educational Affiliate members. Mike has been a member of CREIA and ASHI for nearly 30-years.

Mike can be reached at Mike@MichaelCasey.com

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Water Conservation and Quality: Get Water Smart

BY ANDY FRENCH

*In this land of sunshine
There has come a time of drought
Of this there is no doubt
So in our toilets
If its yellow let it mellow
If its brown flush it down*

Perhaps that is too 1970s for many of us. In truth I first saw a version of this poem at a friend's house in Petaluma in 1975. Existing toilets in those days were almost all 5 gallons per flush (effectively more). So flushing 6 or 8 ounces of urine with 640 ounces of drinking water was an obvious problem.

Many people were just repulsed by the idea of not flushing every time and many still are. Standards have changed. A current toilet is rated 1.28 gallons per flush, approximately 164 ounces. So flushing after (each) urination now costs about one fourth as much water as it did in the 1970s.

CHANGING STANDARDS

Soon the plumbing industry with prodding from the governmental sector developed 3.5 gallons per flush toilets. Rebate programs began. Plumbing codes were revised and by 1983 Federal law prohibited producing or selling toilets rated at more than 3.5 gallons per flush. By 1994 toilets rated at more than 1.6 gallon per flush (low flow) could not be manufactured or sold. Many manufacturers had low flow models available prior to those dates. Today the standard is 1.28 gallons per flush (aka ultra low flow). California was effectively required beginning January 1, 2014 in new construction. Many cities have the required upgrades on sale.

Over the years with the various rebates some houses would qualify for upgrade rebates more than once. This has been a pretty good deal for the toilet manufacturers and service plumbers. But, it is not without issues. Older piping both on the premises and in the city sewer mains often needs more water than is provided by these lower flush toilets. Reportedly, the City of San Francisco has been

required to add water to some sewer mains to make up for the lower flows.

When it comes to the brown side, many of these toilets, especially the early 1.6-gallon per flush toilets, did not clear well. It often took two to four flushes for them to work. The industry responded by developing a MaP (Maximum Performance) standard. Most manufacturers now have one or more models that have a 3-inch flapper, a porcelain coating that continues all the way through the trap, which is smoother and cleaner. Many of these toilets are 17 inches high versus the old standard of 14 inches high. That extra 3 inches of fall seems to make a difference. There are many videos online where 30 or 40 golf balls, strawberries, or other objects are flushed. Looking at those videos, almost all advanced toilets pulse a strong flow of water into the bowl at the bottom to lift the objects so that they do not all rush at the same time into the throat of the trap.

Most manufacturers now produce a dual flush model that uses 1.1 gallons of water for flushing liquids only, while using 1.6 or 1.28 gallons for solids. These have been available for a number of years and are becoming more popular.

FLAPPER VALVES

In addition to the frequency of flushing and the volume of the flush, another important criteria is the waste created by leaking flappers. All inspectors have seen toilets that have a small water flow seeping continuously into the bowl. This is usually getting through between the flapper and the raised opening for the main drain at the tank. These flappers get brittle, may crack, or sometimes they just warp. People often change out the flappers with one that does not fit well. Tests have been done using universal flappers versus the manufacturer's original equipment rated flapper. In some cases 1.6 gallon per flush toilets actually used 5 gallons. People often place cleaning treatment chemicals in their toilet tanks, but that also can damage the flapper, so that practice is not recommended.

WATER PRESSURE

Some discussion of water pressure should be made here. Excessive water pressure is a known cause of wasting water. In the case of a toilet, the water that flows into the overflow tube from the ballcock is considerably more at 80 PSI than it is at 50 or 60 PSI. Quantifying this for toilets is a bit difficult, but there are studies comparing flow rates on aerators for kitchen sinks, lavatories, and showerheads. Typically aerators are rated at 60 PSI. At 80 PSI they flow more than the proportional increase in pressure. So a person rinsing their toothbrush, rinsing their razor, taking a long shower, rinsing dishes and other similar operations are going to use more water at these higher pressures.

Many homes have no water pressure regulator at all, or the regulator is broken. So there is no control of the house pressure compared to the pressure in the water mains. So installing a water pressure regulator and setting it to an appropriate level is one of the simplest water saving techniques we can recommend.

In addition slab leaks, faucet drips, and other water piping leaks are less frequent at lower pressures. Perhaps the only time when higher pressure is really needed in a typical house would be when it is piped with old galvanized water piping. Sometimes higher pressure is just simply needed. There are dual gauges that will give flow rate and pressure. In areas with a lot of galvanized water piping still in use, it is very appropriate to provide this test. Occasionally there will be a large house or apartment building that has undersized water piping. Higher pressure is allowed in the plumbing codes to address this.

WATER QUALITY

The City of San Diego has just adopted a water use policy that allows the City to take treated water from the municipal sewer plants, provide additional treatment, and supply it as drinking water. This has been done in Orange County, but it goes through a reservoir system where it is mixed with other water and spends

CONTINUED ON PAGE 23



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some time in the reservoir. I admit, as perhaps some of you also feel, that I do not totally trust government to never make a mistake. Therefore, I have been recommending that my clients install a whole house water filter just after the water pressure regulator, and a reverse osmosis water filter at the primary drinking supply, typically the kitchen sink.

Reverse osmosis water filters have issues. One of which is that they need to flow all the time, and they also flow slowly. Until about 15 or 20 years ago there was a cross connection. The continuous flow discharge line was typically tapped into the drainage tubing under the sink. That is still done now but the discharge line is run through the spout where there is an air gap. These can be identified easily. There will be 3 tubes coming from the system to the air gap fitting. The single tube fill spout will not have air gap. There are other ways to address this, but this condition is very common with reverse osmosis water filters.

Filters have to be changed. Time frames have to be recorded to assure that their being changed soon enough. I think there should be a calendar kept near the filters. Many manufacturers provide them.

Reverse osmosis water filters also leak. I have seen significant damage to the kitchen cabinets and walls. In some cases there was evidence of a heavy mold like condition. These systems have small tubes with plastic fittings. The tubes vibrate when water shuts off and on. People shove things under the sink, which presses on the tubing. Leaks develop. I recommend that there be a plastic catch pan placed under these filters. I recommend a battery powered water sensor be placed in that pan.

I recommend that reverse osmosis filters be placed in the garage if it is close enough.

FILL SPOUTS

Bathtub fill spouts drip while in shower mode. Almost all of them drip a little bit. Some of them are almost half speed. This is purely wastewater. Also since almost everybody takes a warm shower, this is wasting gas or electricity. These diverters are often a spade type valve. They often do not work well right out of the box, but also corrosion and water deposits affect the seal.



Improper irrigation practices are also a significant issue. That is an entire different article however. Also concerns with hot water recirculating systems have many water conservation issues.

TOILET RATING DATES

5 gallons per flush to 3.5	January 1, 1983 Federal
3.5 gallons per flush to 1.6	January 1, 1994 Federal
1.6 gallons per flush to 2.8	January 1, 2014 State

We are the front line of educating homeowners about the issues with their house. We have the ability to improve how people use their home in many ways, including water conservation. Lets use that power well.

About the Author: Andy French is a Master CREIA Inspector, ASHI Certified Inspector, and is certified by the International Code Council as a Residential Combination Inspector (California Legacy Codes), Electrical Inspector, Plumbing Inspector, and Combination Light Commercial Inspector. He has been performing real estate inspections in San Diego since January of 1996. Mr. French also is a US Green Building Council LEAD AP. He has held the offices of Sec., VP, and President for the San Diego CREIA chapter and is a past president of the San Diego ASHI chapter. He has recently completed a four-year term on the CREIA state board, serving as the Treasurer for 2 years and the Vice Chairman for one year.

SAFETY :

THE CALIFORNIA BUSINESS AND PROFESSIONS CODE AND THE CREIA CONTRACT/SOP

BY STEVE JOHN

The California Business & Professions Code sections 7195 through 7199 are the law that governs Home Inspectors in this state. It is a mere two pages long and it is the responsibility of each of us to know and understand this document. Our contract and our SOP are designed to work in harmony with the B&P code but you cannot understand your legal responsibilities without knowing the critical elements of this law. A copy is provided for you after this article.

You should be familiar with all of the provisions, but for the purpose of this article, I will zero in on just a few key passages that are critical to understanding the law and its relation to our SOP and contract. I have stripped the B&P down to its essence for the purpose of clarity but made every effort not to distort its intent. Section 7195(a) starts: “Home Inspection” is ...designed to identify material defects... (b) A “material defect” is a condition that significantly effects the value, desirability, habitability, or safety of the dwelling.” These words are the crux of our responsibility from which we cannot hide. The words, “value, desirability and habitability” are very subjective and one goal in writing the SOP was to define and provide parameters for these terms that were both fair and defensible.

The terms “value, desirability, and habitability” will give us some liability but that level of liability pales in relation to the risks associated with our responsibility to identify “safety” issues. Consequently, this article will focus on how critical it is to be vigilant to report safety issues. The contract and SOP can only limit our scope and exposure to a reasonable degree but nothing in these documents can insulate us from our core responsibility under the law to report safety issues. The bottom line is that if you see a potential safety concern – report it. If you are not sure if something may be unsafe – for your own safety – report it and refer it out for further evaluation. This is best illustrated with a couple examples.

Ground Fault Circuit Interrupters GFCI’s are credited with saving many lives every year and could save many more if all older homes were upgraded to meet more recent standards. Do we need to report on GFCI’s in the home? – YES – they are clearly a safety concern and need to be reported – period. There has been discussion among some long-time inspectors that the standards of practice were lowered from the standards that existed prior to 2006 because the current standard no longer specifically specify GFCI’s as items to be inspected. However, outlets are a required component of the SOP and the GFCI function is a critical SAFETY component that needs to be addressed. The SOP states: “The inspector is not required to operate circuit breakers or circuit

interrupters.” This language was added to allow the Home Inspector to use sound judgment to determine when it was appropriate to test the GFCI’s. (The restrictions on operating GFCI’s are a topic for an electrical seminar, not here.) The important point is that GFCI’s must still be discussed in the inspection report specifically because they are a SAFETY issue. In revising the SOP we believed that Home Inspectors needed and deserved to have more latitude to determine how to report an issue like GFCI’s and should be respected to have the judgment to determine when actual testing was appropriate. Just because you are ‘not required’ to operate the GFCI doesn’t mean that you can’t. I do whenever possible. The bottom line is that even if you don’t test them, you still need to report on the lack of GFCI’s. I don’t want to beat you over the head, but this same discussion could play out with any safety issue. You need to understand that the Building and Professions Code supersedes our contract and SOP and the B&P Code makes us responsible for safety concerns – period.

Those of us that revised the Standards of Practice back in 2006 clearly understood that the requirement for reporting safety issues came directly from the B&P code. Even if a topic is not specifically listed as required to be reported, you have a requirement to report on safety issues that supersedes the SOP and should permeate your every thought as you do your inspections.

There is no better way to address this issue than to talk about safety glass. Bob Fennema did a wonderful presentation that made us all aware of the risks and pitfalls of properly identifying safety glass. One of the things I remember him saying was that the largest court award against a home inspector was for the failure to report a lack of safety glass in a location where it would be required today.

So why isn’t safety glass listed as an item to be inspected in the Standards of Practice if we still need to report on it? All of us who’ve worked to develop our Standards of Practice knew that safety glass needs to be reported specifically because it is a safety issue and we are responsible for all safety issues because of the language in the B&P code. We removed it from the SOP because it is such a huge liability and it does not make sense to paint large red targets on our backs for every plaintiff’s attorney by stating an affirmative duty to do so. We removed it from the SOP because it can be all too easy to miss a particular location. We removed it to allow the home inspector more latitude in how best to report the issue. You may want to include report language whenever a home was built before safety glass was required in a sliding glass door (or any other location) that further evaluation is

CONTINUED ON PAGE 25

needed to determine if the glass has been upgraded and recommend that it be replaced for safety. I use standard statements whenever I can't absolutely confirm that every piece that should be replaced has been upgraded. Our current standards give you more freedom in how to report the issue and reduce our level of liability if we inadvertently miss a particular location, but they in no way eliminate our responsibility to report on this or any safety issue.

In addition I would like to drive home how Bob's example shows us once again how safety issues supersede the age of the house. It would be sheer folly to think that you would not need to report this issue because safety glass was not required when this house was built. Safety doesn't care when the house was built and supersedes our Standards of Practice. Your greatest liability comes from failure to report a safety issue and this is where you need the greatest vigilance.

Before our SOP was revised we were aware from feedback from the legal community and inspectors doing expert witness work that a CREIA inspector was more difficult to defend than an ASHI inspector using their SOP. This has been completely corrected. As part of the revision process, we compared every line of our SOP with the ASHI SOP and the current SOP's are now much more in harmony. The ASHI SOP has never mentioned safety glass and now we no longer mention safety glass in our SOP.

Although I have expounded on just a couple of safety issues, you need to use this same thought process whenever you see a fountain or other concrete statuary that isn't secure and could fall over on a child, or a shallow pond or water feature that a toddler could stumble into. Or the wide spacing on a guardrail that may have been allowed in the past or a completely unprotected walk-off or any of thousands of safety items that we encounter in and around homes every day. Find a place in your report to recommend that all ionization type smoke alarms be replaced with photoelectric alarms. (That's a 500 death per year issue – that's a big number.) And it seems inexcusable not to recommend a smoke alarm in any bedroom that doesn't have one regardless of the age of the home. Every inspection you do provides you with another potential opportunity to save a life. Even if altruism isn't your thing, safety issues need to be your top priority because they are certainly your top liability.

I feel that this issue of safety has not been addressed clearly or directly enough in the past and hope this article corrects that. I look forward to the day that a conference speaker can ask the audience if a safety issue needs to be included in their report and the audience realizes that it is meant to be a rhetorical question. Of course it needs to be reported – it is a safety issue. The B&P code requires it and we cannot escape our responsibility to report it. Protect yourself, protect your clients, and report all safety issues.

Of course there are other provisions in the B&P Code that impact our inspections and cover issues besides safety and material defect. Section 7195 (c) states: 'A "home inspection report" is a written report' (my underlining). Clearly if the inspected property is four units or less, the report is required to be written – no verbal consultation. Furthermore, pictures can be very helpful but they need to be accompanied by written

information explaining the pictures.

The section continues: "The report clearly describes and identifies the inspected systems, structures, or components of the dwelling, any material defects identified, and any recommendations regarding the conditions observed or recommendations for evaluation by appropriate persons." There are three major components to this sentence and we have an obligation to comply with each. First, we must: clearly describe and identify the inspected systems, structures, and components of the dwelling. The SOP doesn't dictate how this is to be done and allows the inspector discretion to use their judgment. To be honest, only a minimal amount of information is needed to comply with this provision of the B&P Code and this is not an issue with any serious liability. Just providing the SOP as part of your report essentially fulfills this requirement all by itself by stating which systems, structures and components are to be inspected. I encourage you to include any information you feel will be helpful to your clients but from a legal perspective your responsibility is to report defects, not to describe the systems. Some inspectors, myself included, may choose to include brand and model numbers which can be helpful but that level of detail is clearly far beyond our SOP and definitely not needed to comply with California law. However, it is safe to say that providing more information is better than less.

The last part of this sentence in the B&P is another area the B&P dictates what is required of us. Not only does it tell us that we are responsible to report "material defects" but we need to go further and follow through. We are given the option to make recommendations regarding the conditions observed or recommend further evaluation. So many speakers, at so many conferences over the years, have repeated in one way or another the requirement to not only identify the problem but make a recommendation for further action or defer it out for further evaluation. This is where that requirement comes from – not our contract – not our SOP – it comes from California law. The last words in the sentence "evaluation by appropriate persons" should encourage us to give our clients more direction than I see in some reports. Just because a problem is with the water heater doesn't mean your client will realize it should be repaired by a plumbing contractor, so tell them.

I would encourage all inspectors to be well versed in every provision in the B&P code, but most of the other provisions relate more to ethics than the Standards of Practice, which is the scope of this article. Our Contract/SOP was not written in a vacuum. You must know and follow the law in California laid out in the B&P Code, which is just as important as our Contract/SOP. The two go hand in hand and are equally critical to understanding our responsibilities as home inspectors. For any of you that don't have a copy of the B&P Code sections that cover home inspectors they are reprinted here for your convenience.

I look forward to any questions or feedback you may have. Please email me directly.

Steve John, MCI, CNCS
All Pro Home Inspections
4SteveJohn@att.net



CALIFORNIA BUSINESS & PROFESSIONS CODE

The people of the State of California do enact as follows:

SECTION 1

It is the intent of the Legislature in enacting this act to assure that consumers of home inspection services can rely upon the competence of home inspectors.

It is the intent of the Legislature that, in ascertaining the degree of care that would be exercised by a reasonably prudent home inspector pursuant to Section 7196 of the Business and Professions Code, the court may consider the standards of practice and code of ethics of the California Real Estate Inspection Association, the American Society of Home Inspectors, or other nationally recognized professional home inspection associations.

SECTION 2

Chapter 9.3 (commencing with section 7195) is added to Division 3 of the Business and Professions Code, to read:

CHAPTER 9.3. HOME INSPECTORS

7195

For purposes of this chapter, the following definitions apply:

(a)

(1) "Home inspection" is a noninvasive, physical examination, performed for a fee in connection with a transfer, as defined in subdivision (e), of real property, of the mechanical, electrical, or plumbing systems or the structural and essential components of a residential dwelling of one to four units designed to identify material defects in those systems, structures and components. "Home inspection" also includes any consultation regarding the property that is represented to be a home inspection or any confusingly similar term.

(2) "Home inspection," if requested by the client, may include an inspection of energy efficiency. Energy efficiency items to be inspected may include the following:

CONTINUED ON PAGE 27

- (A) A noninvasive inspection of insulation R-values in attics, roofs, walls, floors, and ducts.
 - (B) The number of window glass panes and frame types.
 - (C) The heating and cooling equipment and water heating systems.
 - (D) The age and fuel type of major appliances.
 - (E) The exhaust and cooling fans.
 - (F) The type of thermostat and other systems.
 - (G) The general integrity and potential leakage areas of walls, window areas, doors, and duct systems.
 - (H) The solar control efficiency of existing windows.
- (b) A “material defect” is a condition that significantly affects the value, desirability, habitability, or safety of the dwelling. Style or aesthetics shall not be considered in determining whether a system, structure, or component is defective.
- (c) A “home inspection report” is a written report prepared for a fee and issued after a home inspection. The report clearly describes and identifies the inspected systems, structures, or components of the dwelling, any material defects identified, and any recommendations regarding the conditions observed or recommendations for evaluation by appropriate persons.
- (d) A “home inspector” is any individual who performs a home inspection.
- (e) “Transfer” is a transfer by sale, exchange, installment land sale contract, as defined in Section 2985 of the Civil Code, lease with an option to purchase, any other option to purchase, or ground lease coupled with improvements, of real property or residential stock cooperative, improved with or consisting of not less than one nor more than four dwelling units.

7196.

It is the duty of a home inspector who is not licensed as a general contractor, structural pest control operator, or architect, or registered as a professional engineer to conduct a home inspection with the degree of care that a reasonably prudent home inspector would exercise.

7196.1

- (a) Nothing in this chapter shall be construed to allow home inspectors who are not registered engineers to perform any analysis of the systems, components, or structural integrity of a dwelling that would constitute the practice of civil, electrical, or mechanical engineering, or to exempt a home inspector from chapter 3 (commencing with Section 5500), Chapter 7 (commencing with Section 6700), Chapter 9 (commencing with Section 7000), or Chapter 14 (commencing with Section 8500) of Division 3.
- (b) This chapter does not apply to a registered engineer, licensed land surveyor, or licensed architect acting pursuant to his or her professional registration or license, nor does it affect the obligations of a real estate licensee or transferor under Article 1.5 (commencing with Section 1102) of Chapter 2 of Title 4 of Part 3 of Division 2 of, or Article 2 (commencing with Section 2079) of Chapter 3 of Title 6 of Part 4 of Division 3 of, the Civil Code.

7197

It is an unfair business practice for a home inspector, a company that employs the inspector, or a company that is controlled by a company that also has a financial interest in a company employing a home inspector, to do any of the following:

- (a) To perform or offer to perform, for an additional fee, any repairs to a structure on which the inspector, or the inspector's company, has prepared a home inspection report in the past 12 months.
- (b) Inspect for a fee any property in which the inspector, or the inspector's company, has any financial interest or any interest in the transfer of the property.
- (c) To offer or deliver any compensation, inducement, or reward to the owner of the inspected property, the broker, or agent, for the referral of any business to the inspector or the inspection company.
- (d) Accept an engagement to make an inspection or to prepare a report in which the employment itself or the fee payable for the inspection is contingent upon the conclusions in the report, pre-established findings, or the close of escrow.
- (e) A home protection company that is affiliated with or that retains the home inspector does not violate this section if it performs repairs pursuant to claims made under the home protection contract.

7198

Contractual provisions that purport to waive the duty owed pursuant to Section 7196, or limit the liability of the home inspector to the cost of the home inspection report, are contrary to public policy and invalid.

7199

The time for commencement of a legal action for breach of duty arising from a home inspection report shall not exceed four years from the date of the inspection.

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INSPECTOR JOURNAL

A PUBLICATION OF THE CALIFORNIA REAL ESTATE INSPECTION ASSOCIATION



ATTENTION MEMBERS:

If you have editorial ideas or would like to submit an article for Inspector Journal, please do so at anytime to the CREIA office at ceo@creia.org.

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CHAPTER CALENDAR 2015

**FOR MORE INFORMATION
GO TO WWW.CREIA.ORG AND
CLICK ON UPCOMING EVENTS!**

DELTA CHAPTER:

2nd Wednesday of the month, 6 p.m.
CK Grill and Bar, 14725 Harlan Rd, Lathrop, CA 95330

GOLDEN GATE CHAPTER:

1st Tuesday of each month 7 p.m.
Buttercup Grill & Bar
660 Ygnacio Valley Rd., Walnut Creek, CA 95496

GREATER SACRAMENTO CHAPTER:

3rd Wednesday of the month, 6 p.m.
Sam's Hof Brau
2500 Watt Ave., Sacramento, CA 95821

GREATER SAN GABRIEL VALLEY CHAPTER:

2nd Tuesday of each month 5 p.m.
Zapata Vive, 101 S. 1st Ave., Arcadia, CA 91006

INLAND EMPIRE CHAPTER:

3rd Wednesday of each month 7 p.m.
Carrows, 11669 E. Foothill Blvd., Rancho Cucamonga, CA 91730

KERN COUNTY CHAPTER:

3rd Tuesday of each month 6 p.m.
Casa Munoz Restaurant,
Corner of E. 18th Street & Union Ave., Bakersfield, CA 93305

LA/MID VALLEY CHAPTER:

1st Wednesday of each month 6 p.m.
219 Central Ave., Glendale, CA 91203

LA/VENTURA CHAPTER:

1st Thursday of each month 6 p.m.
Knights of Columbus Hall #3601, Canoga Park, CA 91304

LA WEST/SOUTH BAY CHAPTER:

3rd Wednesday of each month 5 p.m.
Coco's Restaurant
2620 N. Sepulveda Blvd., Manhattan Beach, CA 90266

NORTH BAY CHAPTER:

1st Wednesday of each month 5 p.m.
Ping's Mandarin Restaurant
816 Francisco Blvd. West, San Rafael, CA 94901

NORTH SAN DIEGO/TEMECULA VALLEY CHAPTER:

2nd Thursday of each month 5:30 p.m.
Castle Creek Golf Course

ORANGE COUNTY CHAPTER:

3rd Monday of each month 5:30 p.m.
The Hometown Buffet
1008 East 17th Street, Santa Ana, CA 92704

PALM SPRINGS CHAPTER:

3rd Thursday of each month 6 p.m.
Doral Desert Princess Report, 67-967 Vista Chino & Landau

SAN DIEGO CHAPTER:

1st Tuesday of each month 5:15 p.m.
Dave & Buster's
2931 Camino Del Rio North. San Diego, CA 92108

SAN FRANCISCO / PENINSULA CHAPTER:

4th Tuesday of each month 5:45 p.m.
Mimi's Cafe, Bridgepoint Shopping Center
2208 Bridgepoint Pkwy., San Mateo, CA 94404

SAN JOAQUIN VALLEY CHAPTER:

3rd Wednesday of each month 7 p.m.
Letys Restaurant, 4770 E. Clinton Ave. Fresno, CA 93703

SAN LUIS OBISPO CHAPTER:

3rd Tuesday of each month 6 p.m.
Margie's Diner, 1575 Calle Joaquin, San Luis Obispo, CA 93405

SHASTA/CASCADE CHAPTER:

1st Tuesday of each month 5 p.m.
Sailing Board Restaurant
2772 Churn Creek Rd., Redding, CA 96002

SILICON VALLEY CHAPTER:

2nd Wednesday of each month 5 p.m.
Blue Pheasant Restaurant
22100 Stevens Creek Blvd., Cupertino, CA 95014

TRI-COUNTIES CHAPTER:

2nd Thursday of each month 6 p.m.
Grinder Deli Restaurant & Catering
1 W Los Angeles Ave (Moorpark Ave), Moorpark, CA 93021