



CREIA INSPECTOR Magazine

A PUBLICATION OF THE CALIFORNIA REAL ESTATE INSPECTION ASSOCIATION

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CREIA INSPECTOR Magazine

IN THIS ISSUE:



VISION

To protect lives, health, and investments

MISSION

The California Real Estate Inspection Association promotes excellence in the real estate inspection profession and is committed in supporting every member in achieving the highest level of expertise in the industry.

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CREIA

The California Real Estate Inspection Association (CREIA) is a non-profit association dedicated to using all its resources for the benefit of members and the home buying public they serve. CREIA is an association of members for members, founded on the principle that joining and working together can avail much more to advance the home inspection profession and protect the public than could possibly be accomplished individually.

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CHAIRMAN'S MESSAGE

BY TAYLOR VREEKEN, CCI, CHAIRMAN OF THE BOARD.

CREIA Members and Associates,

This year has presented each of us with challenges and obstacles that none of us have experienced before. I hope you, your families, and businesses are thriving and using this time as an opportunity for growth. In speaking with many of you over the last few months, I am inspired to hear your stories of success and unmatched professionalism in these trying times.

I'd like to say thank you to all of you who attended this year's virtual fall conference. This year was unprecedented in its platform and we are so grateful to those who made it an impactful experience. I would like to send a very special thanks to our course leaders, Gunnar Alquist, Bill Bryan (Associate Track Co-Chair), Alan Carson Mike Casey, Andy French, Massood Gaskari, Douglas Hansen, Peter Hopkins, Will Johnson, Dave McLean, Bill Parker (Conference Chair), Dave Pace, Jay Seidel, Skip Walker, Keith Vreeken and Rich Zak who generously gave their time and expertise to lead courses in CREIA's advanced continued education.

2020 has pushed us to rethink and revamp what is available to members online. We are excited to give more opportunities for virtual learning and provide online meetings. We have developed dynamic opportunities to learn and made them available to you on CREIA's new online education platform. With the help of Legislative Chair, Dave Pace, we are providing members with legislation updates, working to safeguard your business and providing inspection worthy news in real time.

CREIA is undergoing major changes and needs your help to volunteer. Now, more than ever we are looking for members who are willing to share their knowledge, and time. No one is more qualified than the men and women who are out inspecting every day. We have a Board vacancy in Region 2 and we need committee volunteers for membership, Bylaws and Policy, Social Media and Website, and Education. We strongly encourage those wanting to be involved to email info@creia.org.



Thank you, stay safe

Taylor Vreeken, CCI
Chairman of the Board



**Funny Picture submitted by
Joe Nernberg, CCI**

*Mouse stuck to a furnace filter.
Answers the question:
"Are the mice nesting in the ducts?"*

A MESSAGE FROM THE EXECUTIVE DIRECTOR

Is 2020 over yet? 😊

It's hard to believe I have been your ED now for over two years and what a year this has been. I believe we rose to the occasion for virtual learning, a virtual conference and are looking at improving CREIA's Chapter structure. Stay tuned!

It appears that the many who are working from home have decided to change careers and CREIA is benefitting with many new Associate members interested in becoming inspectors. We are working to improve our mentoring programs, instituting additional virtual learning experiences like the group inspection and asking for additional volunteers to assist in training associates. If you are interested in helping, please let us know. E-mail info@creia.org. Our Chairman, Taylor Vreeken and Board Member Bill Bryan are once again engaged with Associates for the NHIE Training and we are grateful for their time in this.

The Virtual Conference was a success and CREIA offered more CECs than ever before. Everyone seemed to enjoy the virtual breaks and Happy Hours and "meeting" a few new members.

The feedback was positive and I would like to thank Bill Parker, the Conference Chair, and Bill Bryan and Taylor Vreeken for chairing the Associate track. It was a lot of work to put on this conference, likely more than in person so we are hopeful we can go back to a live event this Spring but time will tell. The Virtual Conference session content is still available on the CREIA website via the Learning Management System. For those that paid for the conference, the content will be up indefinitely for you to view. For those that didn't register, you may still buy the package or pay for individual courses. Check it out here! <https://www.creia.org/creia-post-conference-access>

I would like to acknowledge and thank Morgan Burke and Derek Kozaites for all of their help with the conference and to Dinusha Fernando our Administrative Assistant for the everyday. And, a heartfelt thank you to the 2019-2020 board and especially to Steve Carroll for his continued leadership as he exited the Board this past summer.

Many thanks to the 2020-2021 Chapter Leaders who have once again stepped up to lead in a challenging time.

While the Spring proved difficult for the inspection business, it appears that everyone is busier than ever so it's a great end to a difficult year.

Happy Holidays to all of you!

Michele Blair
Executive Director

Michele Blair serves as the Executive Director of CREIA effective August of 2018. For 30 years, Ms. Blair has worked as an advocate and policy expert, working with elected officials, private companies, and non-profit organizations. She has developed and implemented strategic plans, government relations, communications programs, community outreach, media relations, and fundraising initiatives. Ms. Blair graduated from the University of Maryland with a B.A. in Economics.



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or
Virtual





CREIA LEGISLATIVE UPDATE

BY DAVE PACE, MCI, LEGISLATIVE CHAIR

On Monday December 7 the new legislative session will begin. Unlike previous years where the Legislators and their families meet at the capital for a celebration of the start of the new session. This year there will be no family members present and the Capital will be essentially empty, as it has been for many months. The Legislators will instead meet in the Golden One Center (Where the Sacramento Kings play basketball). With plenty of room for social distancing the legislative session will begin.

This past week I have had several meetings with Jerry Desmond as well as Marc Engstrom (from Assemblymember Frazier's office) regarding licensing of home inspectors. Due to changes in Assemblymember Frazier's office, Marc will now be the who we will be working with. We have worked with Marc in past years on licensing and other legislation.

We anticipate on Monday a "new" bill will be introduced on the licensing of home inspectors. Marc has indicated the bill will be a compilation or outline of provisions the California State License Board considers important in a licensing bill. (This does not mean licensing will be under the CSLB. That,

like many other provisions, has yet to be determined.) Jerry nor I have as yet seen the bill. By the time you read this the bill be public. Understand the bill in Marc's words is, "to get the process going...to get the conversation started". I am sure there will be plenty of provisions for everyone (home inspector, Realtor, warranty company and legislators) to dislike. The hard work is about to begin...AGAIN.

CREIA has made it clear the protection of the public is our highest priority. Marc has indicated that is Assemblymember Frazier's highest priority as well. How that is best achieved, is the core of the work that lies ahead. Home inspectors MUST have a seat at the table. Legislation is time consuming requiring many hours of research, phone conversations, Zoom meetings, writing drafts, rewriting drafts, revising and rewriting drafts. Every hour in a meeting requires many hours of preparation. Legislation is also expensive. We need your support. Please consider a donation to CHILAC. Your support is critical

Fasten your seat belts. We will keep you informed.

CUTTING OR MODIFYING TRUSSES

BY KEN TERRY, CCI, AMERICAN WEST HOME INSPECTION, INC.

During my 30 plus years in the home building industry and 20 years of inspecting homes in all phases of construction, I have installed, supervised the installation, and inspected thousands of truss systems.

But I must first explain what a truss is. Trusses are engineered components that are made to be installed on the house to hold the roofing system in place. The truss is quite literally the framework that supports the roof over the house.

Most truss systems are constructed of wood and held together with gang nails which are large flat metal plates with teeth that are pressed into place to hold the joints together. Trusses are designed with a top cord, the section of the truss that supports the roof, the bottom cord, which is where the ceiling material is hung, and the web ties. Web ties have many different configurations, but they all act in the same way and that is to tie the bottom and top cords together and strengthen the truss. Webbing within a truss can also direct shear and bearing points from the roof to an interior wall.

Further, truss components are designed to work together as a structural system. They have specific design and load calculation figured into their individual and system design. The individual truss by itself is basically useless and will just fall over. But when the trusses are raised and tied together by their design, they give the house a solid platform on which the roof system can be installed.

All of the trusses and components, including the ties, bracing, and blocks must be in place for the truss system to be structurally sufficient by engineered



design. When components are left out or removed, the structural integrity of the truss and system is compromised.

Tie braces are important to tie all the trusses together per the design. These are usually in the form of 1x or 2x materials run horizontally - tying the trusses together. Again, the trusses act together to give the house a solid roof platform.

Sway braces are also important members that are installed in the truss system to help resist wind loads. Sway braces come in the form of 2x materials installed at approximately a 45-degree angle usually at the gable ends. These are very important especially when the winds kick up.

Eave blocks, ridge blocks, and overspan blocking are also important components to the structural integrity of the system to give the roof sheathing a structural tie by which they can be end nailed to the truss structure.

And then there is the truss itself. There are times when I come across trusses that have been cut and/or modified.

Removing any section of a truss will compromise the structural integrity of that truss. Never cut or modify a truss without first obtaining a written authorization and/or modification from the truss design engineer.

The installation of that whole house fan or relocating the return vent may seem like a great idea at the time but cutting the truss can be a costly mistake. Note: the modified truss may hold fine with the dead load, which is the load applied by the structure and components, but when a live load is applied, such as wind, then failure can take place in the form of truss and roof collapse. Repairs to a compromised truss can include the need to have an engineer calculate a structural repair for the truss as well as the need for the actual truss repair.

So, I pay special attention to the truss system and all the components that make up that system. When I come across cut or modified trusses it goes in the report where I state that the truss must be evaluated and serviced to prevent possible structural failure.



GFCI AND AFCI DATE MATRIX

COMPILED BY GUNNAR ALQUIST, CCI BOARD MEMBER AND TIE CHAIR

Hi folks,

I created a rather nifty table that provides information on GFCIs and AFCIs. It specifies required locations, NEC/CEC dates, and enforcement dates. A version was originally given to me by a colleague in Florida and I reworked it when he stopped updating. I keep it in my phone and if I know the age of the home, I can check the reference to figure out if a device was required in a specific location.

I put a lot of work into it (double and triple checking my references) and believe others will as well. At some point I will need to update it to the 2020 NEC.

On a related note, you will notice that I was unable to confirm some of the information. Specifically, I am unable to find 1974/1975, 1984 & 1990 NEC and the NEC website does not have them available either (go figure). Does anyone know if those years were published? If someone has those, it would be helpful to verify those few references.

Thanks,
Gunnar

CONTINUED ON PAGE 10

Required Locations for 120 volt GFCI Protected Receptacle Outlets in Residences

Date of NEC Based on (NEC) Edition	Exterior	Garage	Bathroom	Hydromassage Tubs	Kitchens	Sinks & Wet Bars	Laundry	Foundation Crawlspace	Unfinished Basements	Swimming Pools	Spas & Hot Tubs	Accessory Buildings	Boathouses
{1971}	E 1									P 1			
{1975} [4]	E 1		A							P 1			
{1978}	E 2	A	A							P 1			
{1981}	E 2	G 1	A							P 1	SH 1		
{1984} [4]	E 2	G 1	A							P 2	SH 1		
{1987}	E 2	G 1	A	H 1	K 1				U 1	P 2	SH 1,2		A
{1990} [4]	E 2	G 1	A	H 1	K 1			C	U 2	P 2	SH 1,2		A
1995 {1993} [1]	E 2	G 1	A	H 1	K 1	S 1		U 2,3	U 2,3	P 2	SH 1,2		A
1998 {1996} [1]	E 3	G 1	A	H 2,3	K 2	S 1		C	U 2,4	P 3	SH 1,2	G 2	A
2001 {1999} [1]	E 3	G 1	A	H 2,3	K 2	S 1		C	U 2,3	P 3	SH 1,2	G 2	A
2004 {2002} [1]	E 3	G 1	A	H 2,3	K 2	S 1		C	U 2,3	P 3	SH 1,2	G 2	A
2007 {2005} [1]	E 3	G 1	A	H 2,3	K 2	S 1	L 1	C	U 3,4,5	P 3	SH 1,2	G 2	A
2010 {2008} [1,2]	E 3	A	A	H 2,4	K 2	S 1	L 1	C	U 5	P 4	SH 1,3	G 2	A
2013 {2011} [1,2]	E 3	A	A	H 2,4	K 2	S 1	L 1	C	U 5	P 4	SH 1,3	G 2	A
2016 {2014} [1,2,3]	E 3	A	B	H 2,4	K 2,3	S 2	A	C	U 5	P 4	SH 1,3	G 2	A
2019 {2017} [1,2,3]	E 3	A	B	H 2,4	K 2,3	S 2	A	C	U 5	P 4	SH 1,3	G 2	A

- [1] Beginning with 1995 {1993}, all receptacle outlets which are replaced & are in locations which require GFCI protection in the code applicable at the time of replacement shall be GFCI protected. 210-22(d), 215-8
- [2] Beginning with 2010 {2008}, all receptacle outlets installed in any damp and/or wet locations are required to be listed as weather-resistant (WR), including GFCI devices.
- [3] Beginning with 2016 {2014}, kitchen & laundry areas require both GFCI and AFCI protection.
- [4] Inferred, not confirmed - Do not have access to 1975, 1984, & 1990 NEC.
- A All receptacle outlets.
- B All including receptacles within 6' of outside edge of tub or shower (can be outside of bathroom). 210.8(A)
- C At or below grade level. 210.8 (a)
- E1 Effective January 1, {1973}, all receptacle outlets. 210-22, 215-8
- E2 All w/ direct grade access to dwelling & receptacles. {1987-Direct grade defined as 6'6" or less above grade}
- E3 All receptacle outlets except for snow melt equip. if on a dedicated circuit & not readily accessible. 210.8(A)
- G1 All receptacle outlets. (Exception 1) not readily accessible (6'8"+) & (Exc.2) appliances in dedicated space.
- G2 All recept. in accessory building w/floor at/below grade, not intended as habitable, limit to storage, work & similar.
- H1 All circuits supplying a hydromassage tub are required to be GFCI protected.
- H2 Hydromassage tub & associated electric components shall be GFCI protected by GFCI circuit or receptacle.
- H3 All 120 volt receptacle outlets serving hydromassage tub within 5 feet horizontally from inside walls of tub.
- H4 All 120 volt, 30 amp & less, receptacles serving hydromassage tub within 6' horizontally from inside walls of tub.
- K1 Receptacle outlets which serve the counter surfaces within 6' of kitchen sink(s). Counter not face-up. 210-8(a)
- K2 All receptacle outlets which serve the counter surfaces. Counter receptacle outlets not face-up. 210.8(a)
- K3 Receptacle outlets for dishwashers. GFCI not allowed behind dishwasher (not readily accessible). 210.8(D)
- L1 Receptacle outlets within 6' of sink.
- P1 All receptacle outlets within 15' of the water, in any direction. No receptacles within 10' of inside of pool walls.
- P2 All receptacle outlets within 20' of the water, in any direction. No receptacles within 10' of inside of pool walls.
- P3 All receptacle outlets within 20' of the water, in any direction. No receptacle outlets within 10' of inside of pool walls, Except receptacle outlets for pumps which must be minimum 5' from inside of pool walls.
- P4 All 120v receptacle outlets within 20' of the water, in any direction. No receptacle outlets within 6' of inside of pool walls, Except receptacle outlets for pumps which must be minimum 10' from inside of pool walls. Except not less than 6' if single outlet, twist-lock, GFCI protected, & grounded. 680.21(C), 680.22(A), 680.22(A), 680.32
- S1 Receptacle outlets serving counter surfaces within 6' of wet bar sink. Outlets not face-up.
- S2 Receptacle outlets within 6' of any sink. Outlets not face-up.
- SH1 Outdoor spa/hot tub. GFCI all receptacle outlets within 15' of the water, in any direction. No receptacle outlets within 10' of inside of spa walls.
- SH2 Indoor. GFCI all receptacle outlet within 10'. Any receptacle outlet must be 5' min. from inside wall of spa/hot tub.
- SH3 Indoor. GFCI all receptacle outlet within 10'. No receptacle outlets within 6' of inside wall of spa/hot tub.
- U1 At least one receptacle outlet & must be GFCI protected identified. 210-8
- U2 All in unfinished basements. Except laundry, single recept. for specific appliance (fridge/sump pump). 210-8(a)
- U3 All receptacle outlets except where not readily accessible.
- U4 All receptacles in unfinished basements, Except appliance in dedicated space & not easily moved. 210-8(a)
- U5 All receptacle outlets, except permanent burglar or fire alarm. 210.8(a)

Required Locations for 120 volt AFCI Protected Circuits in Residences

Date of CEC Based on {NEC} Edition	Bedrooms	Family Rooms	Dining Rooms	Living Rooms	Parlors	Libraries	Dens	Sunrooms	Recreation Rooms	Closets	Hallways	Kitchen	Laundry Area	Similar Areas
2001 {1999}	1													
2004 {2002}	2													
2007 {2005}	2													
2010 {2008}	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2013 {2011}	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2016 {2014}	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2019 {2017}	3	3	3	3	3	3	3	3	3	3	3	3	3	3

- Effective Date: January 1, 2005 {2002}. All 120 volt, 15 & 20 ampere branch circuits supplying **receptacle outlets** in all bedrooms. 210.12 *(not all circuits, just receptacle outlets)*
- Effective CEC {NEC} Date: January 1, 2008 {2005}. All 120 volt, 15 & 20 ampere branch circuits supplying **outlets** in all bedrooms. 210.12 *(not restricted to receptacle outlets, this includes all circuits)*

Exception: May be located at 1st device if both (a) and (b) are met.
(a) Within 6 ft. (conductor length) of overcurrent protection device.
(b) Metal sheath cable or metal raceway.
- Effective CEC {NEC} Date: January 1, 2011 {2008}. All 120 volt, 15 & 20 ampere branch circuits supplying **outlets** in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, kitchens, laundry areas, or similar rooms or areas. AFCI device is at circuit breaker distribution panel 210.12

Exception 1: Where RC, IMC, EMT, or Type AC steel armored cable using metal outlet and junction boxes is used between the breaker and the 1st receptacle of a circuit, the AFCI device is permitted to be installed at the 1st outlet in the circuit.

Exception 2: Fire alarm circuits - provided those circuits are installed in rigid conduit, intermediate conduit, EMT, or Type AC steel armored cable using metal outlet and junction boxes - no AFCI protection is required. (This exception will rarely be applicable for dwelling units)

General Notes for GFCI and AFCI Matrices:

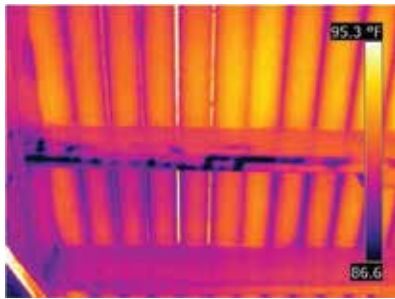
National Electrical Code date is noted in braces {}. California Electrical Code is without. The CEC is modified from the NEC. Typically, enforcement of the CEC in California has been 3 years after the NEC date of publication and one year after the CEC date of publication (i.e. 2017 NEC, becomes 2019 CEC, enforced January 2020).

The above charts and notes are believed to be accurate; however, no guarantee is provided. If inaccurate information is found, please notify me and I will make the necessary corrections.

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INFRARED TRAINING OPTION FOR PEAK PERFORMANCE

BY BILL FABIAN, VICE PRESIDENT, MONROE INFRARED



So after thinking about adding infrared inspections to your services, you decide to go for it because thermal imaging can help identify issues with moisture, heat loss/heat gain, electrical

systems, external exhaust systems, is an absolute must for radiant floor heat, locate unwanted critters, and much more.

Now what? You need a good infrared camera but even more importantly, you need to learn about thermal technology so you will understand what you are doing. Infrared (aka thermography) is a science. Your images will be impacted by multiple factors that you need to learn and understand to interpret your images correctly. Here are some of the different options for infrared training offered throughout the United States:

Online Courses – These courses are a good place to start to learn the terminology and get a basic over-view of thermography. Some people learn technical issues easily and could possibly get by with online training. Other people prefer more interactive training to really grasp technical details.



Certified Residential Thermographer (CRT) Class – The two-day CRT class is specifically designed for Home Inspectors. The class will prepare you for how to utilize your IR camera, interpret results and understand the limitations of thermal imaging. Students graduate with a strong understanding of thermal imaging

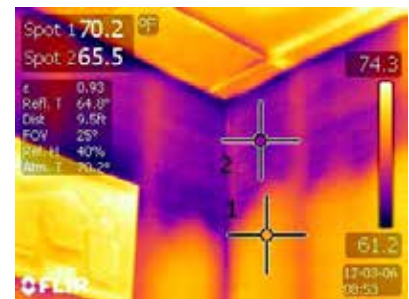
capabilities and applications, as well as the confidence and competence to immediately put that knowledge to use. Upon passing an exam, you will be a Certified Residential Thermographer and be able to utilize the CRT logo in your marketing. Both ASHI and InterNACHI allow 16 CE's. The cost ranges from \$495 to \$595. Due to COVID-19, the CRT class is available via ZOOM now, too.



Level 1 Certification Course – The four-day Level 1 course covers a greater array of material than the CRT class, including commercial buildings, commercial electrical systems,

and machinery. If you believe you may someday offer commercial infrared inspections, you will need a minimum of a Level 1 Certification; possibly a Level 2. Some commercial companies require a Level 2 Certified inspector because their insurance carriers mandate it. The classes are taken sequentially and the cost ranges from \$1670 to \$1,995 for the Infrared Training Center's Level 1 & 2 classes, which we believe are the "gold standard" in Level 1 & 2 Certification courses. Level 1 & 2 classes are available via ZOOM now, too.

How to decide which training is right for you? Between the CRT and the Level 1 Thermography Certification classes, the big question to ask is whether you intend to stay a Home Inspector or



also venture into commercial infrared inspection work? If you want to remain a residential home inspector, the CRT class is an ideal for you. For folks who plan to enter commercial markets, many home inspectors start with the CRT class to gain valuable experience. Then within six months to a year or so, they take the Level 1 class. Some folks later take the Level 2 Certification course as well to increase their knowledge and credentials.

Final Thoughts – If you are going to provide infrared inspections, we highly recommend that you get the most appropriate training available. You will learn what you need know to be competent, confident, and ultimately become an expert in your field. This will enhance your professional reputation and produce results you can stand behind.



STUCCO AND EFFLORESCENCE

BY ED DAHER, AFFILIATE MEMBER

Most any building material, whether it be concrete, masonry or stucco if in direct contact with the earth has the potential for water soluble salts to produce efflorescence.

Efflorescence can originate from more than one source and may be one or more compounds including but not limited to:

Sodium carbonate	Calcium carbonate
Sodium Sulfate	Calcium Sulfate
Sodium Silicate	Magnesium sulfate
Sodium bicarbonate	Potassium Sulfate

Moisture containing these salts, when evaporating from the building products and reaching the surface forms these deposits that are usually white or gray and can look like mold, powder or have the appearance of white fuzz.

The more porous a material, the more likely the problem. Water with efflorescing salts are carried to the structure surface by capillary action. The denser a material, be it stone, brick, concrete or stucco, the more difficult it is for the salt to be transported to the surface which leave the salts deposited beneath the surface.

This problem is usually seasonal and more pronounced in the rainy season and will typically decrease in spring and

disappear during the summer months. Another contributing source not related to the seasons is the constant spray from sprinklers when considering efflorescence on a stucco surface.

At the base of a stucco wall where weep screed is not present, moisture can find its way upward into the stucco membrane. When moisture rises it escapes through a vapor permeable material such as stucco. Depending on the volume of moisture involved evaporation may not match the input volume. This then results in deposit of (Chlorides and Sulfates) "salts." When this occurs, an electrochemical reaction is generated that adversely affects and degrades the stucco.

Ed Daher Plastering Forensic
Stucco Consultant License #315337
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EDITOR'S NOTE:

Consider using the following comment in your reports; There was a condition known as efflorescence on portions of the foundation walls. This is a salt deposit left when moisture in the foundation evaporates. It indicates that the foundation is experiencing wet and dry cycles. We recommend the exterior grading and drainage be improved to divert moisture away from the foundation.

7 TIPS TO PERFORM SAFER ROOF INSPECTIONS

BY STEPHANIE JAYNES, INSPECTORPRO INSURANCE, PREMIER AFFILIATE MEMBER



Note: This article was originally published on the InspectorPro Insurance website.

While performing a routine roof inspection, KC Bartley of Professional Home Inspections set his ladder up on the rear deck of the property. It had rained recently, and a thin coat of mildew coated the deck, making it a little slick. However, Bartley had encountered similar scenarios a hundred times, so he thought nothing of it.

Bartley climbed the ladder, mounted the roof, walked it, and documented what he saw without incident. Getting ready to descend, he put his left foot on the top rung of the ladder. As he lifted his right foot from the roof's surface, the ladder kicked out at the bottom. His left leg slipped through the rungs, and Bartley fell backward 13 feet.

"I literally started crying on the way down. It was slow motion as I was thinking, 'This is how I leave my daughters. This is how I die,'" Bartley said. "At the last minute, God said, 'Throw your arm down.' So, I put my arm above my head and towards the deck."

Bartley's arm partially broke his fall. He landed square on his shoulders, his upper back, and lower neck. Bartley knows the fall made him pass out, but he's not entirely sure for how long. His best guess: less than a minute. When he came to, he looked over at his left arm—the one that had broken his fall. It had doubled in size.

ROOF INSPECTIONS AND HOME INSPECTORS.

Roof inspections pose a significant threat to home inspectors. Bartley broke his radius bone in his arm, comminuted (or splinter-fractured) his wrist, and

broke several carpals in his hand. His injuries put him out of work for eight weeks, and even when he returned, he had to rely on his uninjured arm as the other continued to heal. Nevertheless, Bartley considers himself fortunate. One bad fall from a ladder or roof could end in disability or death.

Thankfully, falling from your ladder or a roof while on the job is avoidable. There are ways for you to manage your risk against harm. In this article, we discuss some precautions and resources to overcome fall hazards you may encounter during inspections.

1. Choose the right ladder.

Choosing the right ladder for you and the inspection property is essential. There are a lot of factors that help determine which ladder is most appropriate for you and your job, including:

Material. Manufacturers primarily produce ladders out of wood, fiberglass, and aluminum. Aluminum ladders may be most convenient for carrying since they tend to be the lightest. However, if your roof inspection is located beside an electrical wire or other power source, using an aluminum ladder can pose an electrical shock risk.

Length. It's important that your ladder isn't the wrong length for the job. With too short a ladder, you may be tempted to step on the top cap, which may lead you to lose your balance. With too long a ladder, it may extend more than three feet beyond the upper support point,

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leading the base of the ladder to move or slide out.

Duty Rating. A ladder's duty rating indicates your ladder's maximum weight capacity. In their article "Ladders 101," the American Ladder Institute lists the five categories of duty ratings, from extra heavy duty (375 pounds) to light duty (200 pounds). You can find your ladder's duty rating on the specifications label on the side of your ladder.

Ladder Variety. There are many types of ladders, including articulating ladders, combination ladders, and single or extension ladders. Each ladder type has different features and requires different safety measures and care.

Condition. The right ladder for a roof inspection is always one that's in good condition. Inspect your ladder regularly to confirm it's safe to climb. The feet, rungs, rails, steps, locking braces, and pulley assembly are all parts of that ladder that you should examine for safety.

2. Wear the right shoes.

According to the American Ladder Institute, bad footwear can also cause falls. Thus, it's important to wear the right shoes when climbing ladders and inspecting roofs. Here are some characteristics industry and safety experts recommend looking for in shoes:

- Flat soles since heels can get caught in ladder rungs
- Heavy soles to prevent foot fatigue
- Excellent traction and slip resistance
- Clean soles for maximum traction

3. Place your ladder in the right spot.

Where you place your ladder can have a significant impact on your safety. As such, it's important to take setting up your ladder seriously every time.

"When you've inspected 2,000 roofs, you start taking things for granted," Bartley said. "You just kind of throw your ladder down and jump on the roof."

Make sure that you always set up your ladder on firm, level ground. There shouldn't be anything that can cause your ladder to slip at the base or top support points.

Also, look out for potential hazards in the surrounding area. If you're placing your ladder near a door, are you sure that door is locked and not going to be opened while you're using your ladder? Are there household pets nearby that could potentially run into and knock over your ladder?

When setting up your ladder, always open it completely so that all the locks engage. If you're using an extension ladder, follow the four-to-one rule: For each four feet of distance between the ground and the upper point of contact—in your case, the wall or the roof—move the base of the ladder out one foot.

4. Tell your clients to stay back.

Some home inspectors like it when clients attend the home inspection. They believe that being present helps their clients have appropriate expectations and helps them better understand inspection findings. However, one area to which clients should never accompany you is the roof.

Do not allow overzealous clients (or agents or anyone else) to climb up the ladder after you. In fact, don't let them anywhere near your ladder. You may consider putting a sign on or beside your ladder to encourage others to stay back. Failure to create strict boundaries around your ladder and your roof inspection could harm you or others.

5. Climb smart.

Once you're off the ground, you can avoid falls by climbing and walking smart. According to the American Ladder Institute, haste or sudden movement

and lack of attention are two major factors that contribute to falls. So, when ascending and descending your ladder, climb slowly and deliberately. Avoid sudden movements and distractions. Stay centered on your ladder and avoid leaning sideways—even to take a better look. And always try to have three points of contact (two hands and one foot, or two feet and one hand).

When it comes to walking the roof safely, a lot of the same techniques apply. Walk slowly and deliberately. Avoid sudden movements or distractions. And watch out for debris—like leaves, twigs, and dead insects—that could cause you to lose your footing.

6. If it's too dangerous, skip it.

Regardless of what you're inspecting, it's important to always put your safety first. While most standards of practice require inspectors to inspect and describe roofing materials, they do not require inspectors to walk every roof surface. Instead, inspectors can choose the method of inspection and the vantage point, based on the individual circumstances.

"I know you want to do your best for your client, but you've got to think about your safety, your family, and everything else," Bartley said. "If you feel just a little bit like something's off or something's not right, don't do it. Don't let your pride get in the way of your safety."

Not all roofs are safe to walk on. Roofs that are wet, icy, mossy, or steep are roofs you should probably skip. Certain roofing materials, like metal or terracotta, may pose to great a risk to you or the property. Roofs too high to safely access are not advisable to walk. Weather—such as high winds, storms, and heat—can also pose potentially too great a danger to get on a ladder and a roof.

In such cases where a roof is unsafe, consider inspecting the roof from a different vantage point. You can inspect the roof from your ladder at the eaves,

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from the ground with binoculars or a pole cam, or from the air with a drone.

7. Carry workers' compensation insurance.

If you or one of your home inspectors is injured during a roof inspection, workers' compensation benefits may be available to you.

Workers' comp insurance provides employees who suffer from work-related injuries or diseases with access to medical and wage benefits. Unlike general liability (GL) insurance, which covers inspection-related bodily injury and property damage claims for non-

employees, workers' compensation looks out for you and the people who work for your company.

"One accident can not only hurt you and maybe put you out of business, but more importantly, that employee has to have a way of making a living and getting his bills paid for it if it happens on the job," said Alan Grubb of 4U Home, Inc.

By covering job-related injury and illness costs, workers' comp protects both employees and employers. Employees work under less financial risk knowing they have on-the-job protection. Additionally, employers limit their liability and deter litigation.

Get a quote for workers' comp for home inspectors today by completing

our application at <https://ipro.insure/CREIA-Mag-wc>.

Stephanie Jaynes is the Marketing Director of InspectorPro Insurance, CREIA's Premier Insurance Affiliate. As a journalism graduate and industry advocate, Jaynes aims to provide home inspectors with thorough and accurate risk management education. Through pre-claims assistance, straightforward coverage, and Jaynes' articles, InspectorPro helps inspectors protect their livelihood and avoid unnecessary risk. Learn more about how Jaynes and the rest of the InspectorPro team can give you peace of mind and better protection at inspectorproinsurance.com.

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IN MEMORIAM: PETER SANDERSON

Former CREIA member Leslie DiFrancesca recently informed us of the passing of member Peter Sanderson, owner of Integrity Home Inspection in Los Angeles. After over 30 years of inspecting houses, meetings, researching code books and attending conferences, the greater inspector community says “Thank You” to Peter for elevating our profession with honesty, hard work and integrity. Thank you also for setting the example that challenges us to crawl a little farther, observe more carefully and analyze a little deeper. Our thoughts go out to Peter’s family and friends. RIP our friend.

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