News of Interest for and from the Connecticut Association of Home Inspectors, Inc.

CAHI MONTHLY NEWS

August 2017 Volume 10, Issue 8

Presidents Corner

August begins the second half of the summer. Before we know it, we will be getting ready to celebrate thanksgiving and Christmas. Time really flies by when you get to my age. I turned 61 this month and I find myself re-evaluating many things. As most of you know, our profession can consume you if you are a sole proprietor, especially when it is busy. However, I did not put the almighty dollar on a pedestal. I always found a way to dedicate the time my children, wife and home required.

Now I realize what some of the guys who are older than me had to deal with as they entered their 60s. Roofs look higher and steeper, ladders are heavier, crawlspaces look bigger, my flashing light doesn't seem as bright, and clients seem tougher. Things that used to roll off of me are now sticking. I am not going to try and re-invent the wheel; I am just going to try to make it roll a little smoother.

As part of that line of thinking, I am considering the future of CAHI as well. The board has a few ideas we are discussing regarding membership, education and presence in the state. We are pulling ideas together for a membership drive. We will reach out to all licensed and permitted interns across the state with some membership offers to try and increase membership and strength for our organization. There is also a discussion for CAHI to host a state home inspection conference in 2019 which will provide education and networking on the statewide level. These items will require significant research and careful planning. I am reaching out to all members to ask for some help in the planning and execution of

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MONTHLY MEETINGS – Details & Info

CAHI's regular monthly meetings are held at the Best Western located at 201 Washington Ave (RT 5), North Haven. Meetings are free to members. Most meetings are on the fourth Wednesday of the month from 7-9pm. Guests are always welcome! Guests may attend 2 free monthly meetings to experience our presentations, meet our members, and receive a CE attendance certificate.

Joining CAHI may be done at anytime of the year through our Membership Page

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Next Meeting!

August - *No Meeting*

Sept 27, 2017

Joe Giaimo

CT Pest Elimination Inc.

Presidents Corner *continued*

these ideas. Give back to the organization that has educated you and fought for the profession that puts food on your table. Help the board members who tirelessly attend board meetings, make decisions and reach out to other organizations that can strengthen ours. Our profession and our organization are small in number, but without CAHI we would be leaderless and trampled underfoot. Any time you have will be helpful. Contact me or any board member if you wish to help build CAHIs future and the future of your profession.

The state has finally posted on their website a clean version of the CT standards with the changes that were approved in May. You can find additional information in this newsletter. We will also be providing a link to the standards on our website.

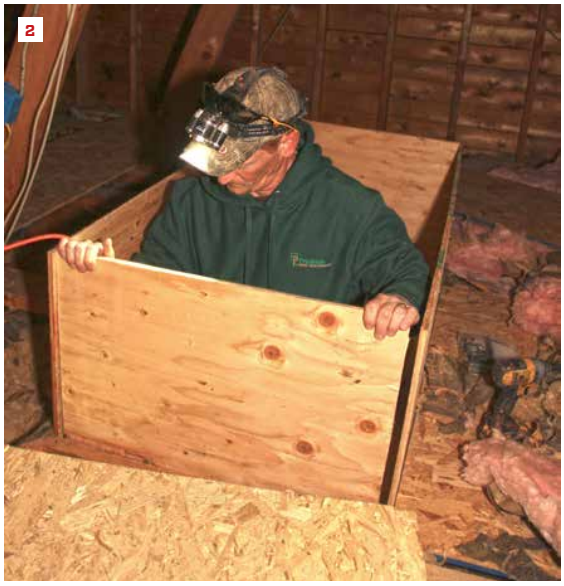
I would also like to remind you that CAHI has a Face book page. Please ask your clients and your Realtors to like our page.

Remember, there is no membership meeting in August. See you in September!

Stan

I don't mind getting older. I'm enjoying not having that raging ambition I've had all my life.
- *Jeremy Irons*

Click HERE for online link to CT Home Inspection Standards



Before rebuilding an attic hatch, home-performance-retrofit technician Marcus Clement builds a plywood dam around the attic floor opening to contain blown cellulose insulation **(1, 2)**. The full job included removing all the old, low-performing batt insulation from the attic, sealing air leaks, and blowing an R-60 cellulose blanket into the attic.

Photos by Ted Cushman

A Site-Built Insulated Attic Hatch

BY TED CUSHMAN

Updating the attic of an existing older home is bread-and-butter business for Matt Damon and Paul Shepherd, the owners of Penobscot Home Performance, in Bucksport, Maine. In May, *JLC* stopped by a jobsite in Rockland, Maine, to see the company's crew building and installing an insulated hatch in the attic.

The full attic job included removing all the existing fiberglass insulation, sealing up all the typical leaks (including partition-wall wiring penetrations, recessed lights, bath fans, and a chimney chase), and then blowing an R-60 blanket of cellulose insulation into the lid. "We blow at 18 inches depth, and it settles to 16," explained Matt Damon.

Retrofit standards in Penobscot's market call for an airtight attic hatch that roughly matches the insulation value in the rest of the attic. Over the years, Damon, Shepherd, and their crews have worked out a solution: a lightweight panel door with a handle in the center, topped by several 2-inch layers of rigid insulation (either polyiso or extruded polystyrene), for an R-value of about 40.

"We put a 1x2 ledger around the opening, and we kerf in a weather strip for airtightness," said Damon. To gain access to the space, the homeowner pulls down the existing access ladder, grasps the door by the handle, and lifts it up. To secure the closed door, the owner dogs it down with window sash locks installed at both ends.

"The design has evolved over time," Damon said. "We used thicker plywood for some of the first ones we made, and those doors were kind of heavy and hard to lift. Now, we use thin AC plywood, or even lauan. We used to use hook-and-eye hardware to lock the doors down, and we've found that the window sash locks are easier to use and work better."

The Penobscot crew tests its jobs with a blower door on the way out, to make sure each job is meeting program targets. The attic hatches are "super tight," Damon said. "Once in a while, if the caulking detail around the ledger isn't perfect, you can get a little air coming out. Then the guys go back and do what we have to do to fix it and tighten it up."

Ted Cushman is a senior editor at JLC.

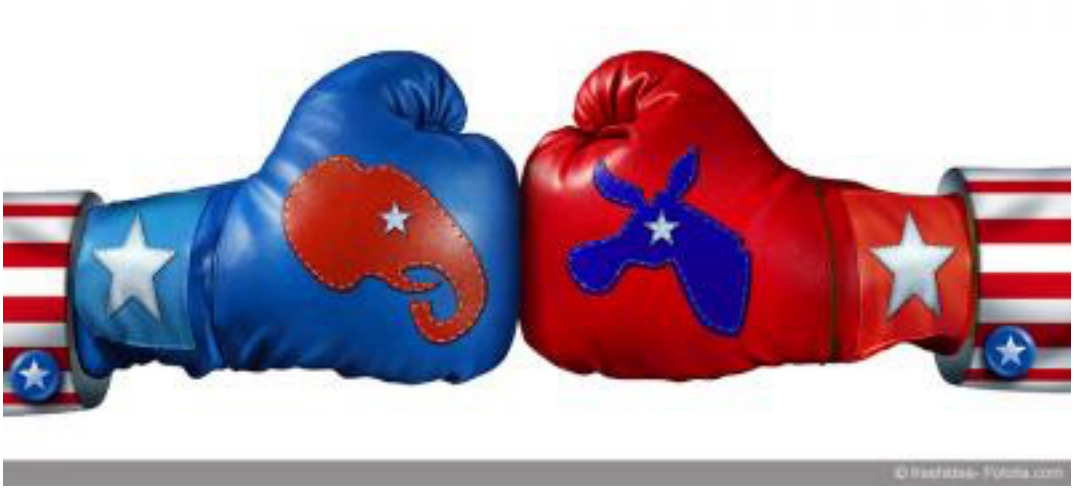
Clement screws a ledger to the plywood hatch box **(3, 4)**. After measuring the opening and cutting a piece of plywood to size, he screws a cabinet door handle to the center of the door **(5)**. The door handle makes it easy to carry the door blank back to the opening for test-fitting and scribing **(6)**, so that he can trim the door as needed for a better fit.

Clement test-fits the thin plywood door blank in the opening **(7)**. Once the piece is trimmed to fit, he screws a 1x2 edge to the blank **(8)** and cuts out foam insulation for the door, using a handsaw **(9)**. He stacks up the insulation **(10)**, secures it with foil tape **(11)**, and installs weather stripping on the door edge **(12)**.

When Clients Talk Politics, Stay Above the Fray

By GRAHAM WOOD

How divisive public discourse is affecting business relationships—and what you can do about it.



Sharla Lau sensed where the conversation was going with one of her clients—and it wasn't about houses. It was shortly after the presidential election last November, and the aftermath of the intensely partisan contest was clearly on the buyer's mind. As Lau and her client toured listings together, the buyer began making leading comments about abortion and "alternative lifestyles," begging for her response, Lau says. He criticized Congress and the rancor in Washington. And then Lau braced when he turned his attention to her personally: "So, who did you vote for?" She declined to respond.

"Yes, I have my thoughts and beliefs, but they are mine," says Lau, ABR, GRI, vice president of Coldwell Banker Fleming-Lau Realty in Fort Smith, Ark. "I have found it's not safe or wise—professionally or personally—to discuss personal beliefs with strangers." She told her client she would rather they stay focused on discussing real estate, and they moved on to have a friendly working relationship. Lau is hardly alone. In this hyperpolitical environment, practitioners are finding themselves grappling with potentially uncomfortable conversations with clients more frequently than ever.

Even eight months out from the election, "this kind of thing still happens all the time with clients," says Joe Mock, e-PRO, a sales associate with Cutler Real Estate in Cincinnati. "I've had to deal with politics in my business more now than at any other point in my 21 years in real estate. I've heard more than once: 'I'll bet you're a Republican because you're a businessman.' And I literally say, 'I don't talk religion or politics with clients.'"

Even if you know better than to raise contentious topics, do you have a ready approach for dealing with others who tend toward the incendiary? How much discomfort will you tolerate from quarrelsome peers before deciding to leave a brokerage or stop working with a client whose views you find virulent? Or are you the one who needs to develop better filters for your own speech?

Blurred Lines Between Professional, Personal

Savvy real estate practitioners have long been careful to avoid mixing political talk with business, but in today's world, deep ideological divides and rampant rhetoric from all sides are putting many on edge and sometimes blurring professional lines. No matter where you go—on social media or in the real world—polarizing commentary is making it trickier to assess how to navigate your communications with clients and colleagues, even when you're not the one getting political.

Given that real estate is a relationship business at its core, the professional advice to simply stick to the nuts and bolts of helping buyers and sellers with transactions may not always cut it. "There's an expectation for you to be genuine and transparent as a real estate professional. But you want to make sure your genuineness is not provocative in a way that disrespects people," says 2011 NAR President Ron Phipps, ABR, GRI, who is helping to develop a REALTOR® University course on online etiquette for real estate professionals. "Great reputations are built one brick at a time, and buildings can come down with one bad move. You can destroy your reputation with one comment."

Severing Ties With Serious Offenders

Sometimes, practitioners have to make hard decisions in order to avoid conflict over personal views with their customers—including disassociating with those who become too irate. In May, REALTOR® Magazine convened two focus groups—one with nine brokers and another with nine agents—during the REALTORS® Legislative Meetings & Trade Expo in Washington, D.C., to learn how the highly charged political climate may be affecting business relationships. All participants acknowledged seeing a rise in politically infused online behavior from both colleagues and clients in the last year. Some said they've defriended or stopped following some business contacts. Several have a personal policy never to become online "friends" with a client until a transaction is over.

Mock, who participated in one of the focus groups, says he has defriended both clients and personal contacts recently for making "serious" negative political comments on his Facebook page. Some have gone as far as to suggest the president be killed, he says. Mock believes associating with people like that threatens his business. "If you're a friend of mine, anybody else who's my friend is a friend of yours by association," he says. "If I stayed friends with someone like that, my clients would say, 'That's not the Joe I know.'"

The focus group discussions also revealed that there is little consensus about how real estate companies should handle difficult situations. Four of the nine participating brokers said they have no formal social media policies in place. One broker from Oklahoma had to fire two agents who refused to "go neutral" on hot-button political issues on the company's social media feeds. Because the business of real estate is often affected by politics, some participants said that focusing on REALTOR® Party issues rather than partisan politics was the best way to avoid alienating clients and colleagues.

"Politics are an inherent part of real estate and do have a place in client dialogue," says Doug Sager, a sales associate with The Grubb Company in Oakland, Calif. "One of the many hats we wear as a real estate professional is the hat of a teacher. We educate our clients on matters that affect them, and we cannot be afraid to bring up topics that impact their goals. It also shows that REALTORS® are about much more than seeking the next closing check; we are a viable political force with a powerful voice in all levels of government."

Is it Ever OK to Reveal Personal Views?

Perhaps the person who needs to watch what they say is you. Real estate agents have lost clients—and their jobs—after making divisive political remarks in public forums. Even REALTOR® association leaders have had missteps. During the 2016 election, REALTORS® threatened to rescind their RPAC donations in response to a state president's online political comments. And in January, an agent in Peoria, Ill., was fired after engaging in a cantankerous Twitter spat over political views that went viral online.

Real estate pros are public ambassadors for their communities, so they should remember that they are representing their business and neighborhoods at all times and on all forums—even if their intent is to "switch" to their personal persona, says Marki Lemons-Rhyal, a Chicago-based real estate coach who teaches social media ethics. "You shouldn't be a practitioner and shouldn't have a license if you think, 'I'll say whatever I want to say,'" she says. "You don't get to take your real estate hat off. If you get online and rant and rave, that sends the message that you won't work with a certain type of client."

Of course, not everyone agrees that professionals must always avoid expressing personal beliefs. But if you do, you have to be willing to accept the consequences. Susan Young, broker in charge at Express Real Estate in Weaverville, N.C., recalls wrestling with the resignation of one of her five agents several years ago. Young says the agent left after expressing anger that Young posted a comment on Facebook supporting gay marriage, which was illegal in North Carolina at the time.

> "The agent told the owner of the company that if she ever ran into a problem, she didn't think I would have her back because we didn't share the same views," Young recalls. The owner did not reprimand Young over the situation, and Young says she doesn't regret her Facebook post. But she did learn a lesson about how her words can have a greater impact because of her higher position in her company. "I realized I'm the broker in charge, and I represent the entire company. It wasn't just me losing something; the whole office lost a good agent," she says.
>
> Some real estate pros simply aren't sweating the risky consequences of working in a combative political climate. One Louisiana practitioner who participated in the focus groups noted that the business impact can accrue to his benefit if certain colleagues become known for their vitriol online or in person: "One of their clients is going to come over to me."

This article appeared in Realtor® Mag online – July 2017

http://realtormag.realtor.org/sales-and-marketing/relationship-management/article/2017/07/when-clients-talk-politics-stay-above-fr?om_rid=AAcfRd&om_mid=_BZcQvIB9d15w2j&om_ntype=NAR-Weekly

HVAC

Air Conditioning for Humid Climates

Air-sealing, right-sizing, and smart controls are the keys

BY CURT KINDER

I manage a full-service HVAC contracting company in the Jacksonville, Fla., market. I'm a trained and experienced engineer, and I got into the air conditioning business after I contracted with a local builder, Dan Hovis of Hovis Custom Builders, to build a custom ICF (insulating concrete form) house for me about 10 years ago. Dan told me that local HVAC contractors wouldn't bid on systems for his custom homes because they didn't believe that a three-ton system could easily handle a 3,000-square-foot house.

"Well," I said, "I'll design it myself." So I did. Out of that experience, Dan and I formed Greener Solutions as a joint venture. My company now designs and installs the HVAC systems for all of Dan's ICF homes. We also install systems for some quality stick-frame builders in our area, and we do system replacements in existing homes of all types and ages.

Whether it's a new home or a retrofit, we insist on right-sizing the systems. We do a room-by-room load calculation using the Air Conditioning Contractors of America (ACCA) Manual J, we specify the ducts supplying each room using ACCA Manual D (if we're installing new ductwork), and we choose mechanical equipment to match those loads and that ductwork. We believe in trusting our numbers—we do the calculation right, and we build the system to match.

Photos by Ted Cushman

The author blower-door tests each home's insulated shell at an early stage in the construction, to identify and seal air leaks. Above, technician Adam Hovis temporarily masks an energy recovery ventilator (ERV) outlet in preparation for a blower-door test **(1)**, while the author tapes over an open drain **(2)**.

ENVELOPE QUALITY CONTROL

For right-sized equipment to perform reliably, we have to be able to count on the building envelope to also perform as designed. So even though I'm the air conditioning contractor and not the framer, the window installer, the insulator, or the siding contractor, I insist on quality control for the envelope details. And in this case, I don't trust: I verify.

I tell my builders that I want to be at the house with my blower-door rig as soon as we have an envelope to test. Ideally, we like to have the attic insulated with spray foam on the underside of the roof sheathing, so our ductwork can be in the conditioned space. And we want to test the home's airtightness as soon as the roof is sprayed but before the walls are insulated—and before there's any drywall loaded into the house to block our access to the walls.

At this point, we're not trying to get a number for anybody's checklist. We just want to find the leaks. So we tape up all the known holes: missing door knobs, dryer vents, bath vents, fireplaces, and the like. Then we crank up the blower door. When you depressurize the house to 100 pascals, you can hear the leaks—they howl.

It's hard to get the pressure cranked down that low if the house is full of holes. But we've learned that air-sealing is iterative. The big leaks hide the small ones. So first you find and fix the big leaks, and then you go back through, with the higher air pressure working in your favor. Now the fans can do more, and the smaller leaks will start to reach out and touch you.

We like to run our test while the foam contractor is still on site. We flag issues using spray paint, and the foam guys come back in to hit the low spots and point-seal the leaks. Then we may take a second (and even a third) run through with a different color paint.

Our main reason for plugging the air leaks is to control moisture.

Technician Jack Hogan zeros the electronic manometer before the blower-door test **(3)**. Hogan points out an air leak near the patio door **(4)**. Hovis marks a gap in the foam insulation for correction by the foam crew **(5)**.

In Florida, humidity is the 800-pound gorilla in the room. I'm particularly concerned about the attic, because even if it's air-sealed and insulated, it usually does not have supply and return registers, so it's indirectly conditioned. I don't want moisture entering that space where it could condense on the ducts.

But I especially don't want excess moisture infiltration in the occupied rooms of the house—in part because of how humidity affects occupant behavior. I'm trying to save the occupants from themselves. If the homeowners are uncomfortable because of the humidity, they will do the only thing that they know how to do: reduce the thermostat set point. The problem there is that we run an outdoor dew point in the 70s for four or five months of the year in Florida, and if your interior temperature measures much below the outdoor dew point, you run a good risk of condensation in the wall cavity behind the drywall—and that's asking for serious trouble.

QUALITY DUCTWORK

Once our Manual J design for the house has given us a room-by-room estimate of the heating and cooling loads, the next step is to use Manual D to specify the airflow needed to meet all those loads on the design day. Then we can make a duct plan.

If I input a room's design load in our Manual D software, it will supply me with the duct sizing: "That room needs one 6-inch duct or two 4-inch ducts." But when in doubt, we increase the duct diameter. If we arrive at the site and we see that we're installing a 60-foot run of 10-inch duct, we may decide to bump it up to 12 inches. This reduces the friction losses and makes sure we have enough air going to the room.

In some cases, however, we may prefer a small-diameter duct. As far as I know, we're the only company in town that uses 3-inch-diameter flex duct. Most companies bottom out at 4 inches, because





Above, installer Luis Ventura inserts a tap collar for a flex-duct connection to a duct board box **(6)**, then tape-seals the collar to the box **(7)**. He butters the inner liner of the flex duct with mastic **(8)**, slips the duct liner over the collar, and tightens a cable tie over the joint using a tensioner **(9)** before taping the flex duct outer liner to the box **(10)**.

that's what the suppliers sell. But we stock 3-inch flex duct by special order so that we can right-size the airflow to walk-in closets, pantries, commode closets, and other very-low-load spaces.

A classic example of this situation is a house with the air handler in the garage, and a laundry room by the entry door from the garage—the first room you hit coming into the house after parking your car. That laundry room will have almost no load, because it has no windows and it's mostly connected to the interior. But it's the first room coming off the air handler, so if you provide it with a 4-inch duct, the register will blow about 60 cfm even though the room only needs 10 cfm. In mid-summer you could hang meat in there—and in the winter when you're heating, it's much warmer than it needs to be.

People may not care a lot, because they don't spend much time in there doing laundry. But you've sacrificed air that is needed elsewhere, and created a comfort issue and sometimes even a noise issue in the laundry room. It's better to use a 3-inch duct, not a 4-inch one, so that you can keep that chilled air backed up in the system for where it's needed—like in the family room, the kitchen, or the southwest bedroom.

Like everyone else in our market, we use a box and flex-duct distribution system, because there isn't the budget to run hard metal duct in a house. And flex duct works fine—as long as you install it correctly. But as with the roof insulation, quality control is what determines whether the duct system works the way it was designed to work.

So our installers are trained to fully stretch the duct out before they connect it, so that the steel wire coil in the duct doesn't crumple inward and create friction in the air path. They know to support it properly, and to seal it carefully at every connection. We are also the only company I know of in our market using Smart Elbows from

Ventura attaches a Hart and Cooley "Smart Flow Elbow" to ensure good airflow through a curved section of flex duct **(11)**. Besides enforcing a smooth bend, the Smart Elbow helps to hold ducts away from obstructions **(12)**. Hogan butters an inner liner with mastic **(13)**, wraps a cable tie around the connection **(14)**, and butters the seams of a register boot with mastic to ensure airtightness **(15)**.

Hart and Cooley. This product is a plastic brace that supports and stiffens flex duct when it has to go around a bend, enforcing the proper radius and keeping the duct from folding in on itself.

In an extreme case where we need a lot of air to flow easily around a corner, we use a hard elbow. I'm looking at an example right now where a design studio is located at the end of a 50-foot run of 12-inch duct, with two 90-degree bends. The duct is properly sized, but to be safe, we're going to use hard steel 90s so we will know that there won't be wire creating turbulence in the air path. It costs a little more for the elbow and its insulation wrap, and for the labor to splice it to the flex duct run, but it buys peace of mind.

EQUIPMENT OPTIONS

The last step in designing an air conditioning system is choosing the equipment. This decision isn't about brand names; just like with Ford or Chevy trucks, people have their favorites, but either maker can supply roughly equivalent products, whether you want the basic economy model or the luxury model with all the accessories. Trane, Carrier, Bryant, American Standard, or Lennox—they're all solid, and I'm probably leaving out a few good ones that I just don't have experience with. Right now, I mainly install systems from Bryant and Trane.

Let's take a look at the choices, starting at the bottom end and assuming that the house needs a three-ton system. Suppose a landlord wants the basic minimum system for a rental house. The code-required minimum Seasonal Energy Efficiency Rating (SEER) is 14. We price a properly sized and installed three-ton code-minimum system at about $4,500. That system has a single-stage compressor and a single-speed blower motor. When the thermostat calls, it will turn on or turn off—that's it. But it will cool the house.

A preapplied paper ruler helps foam installers and inspectors verify application thickness **(16)**. In this high-end system in an insulated attic, three zone supply ducts coming out of a distribution box are equipped with motor-controlled dampers **(17)**; illuminated LEDs on the control device indicate which zones are active **(18)**. Heat from the geothermal system also preheats hot water **(19)**.

The next step up is to a SEER 15 or 15.5 system, which we install for about $5,300. For that money, you get a variable-speed air handler and a touch-screen thermostat with integrated humidity control. If the house is too humid, the air handler can slow down to keep the coil colder and remove more moisture. I recommend this $800 upgrade; it's quieter and it provides better comfort.

The next upgrade is to SEER 16 or SEER 17, a system with a two-stage compressor as well as a variable-speed air handler, which costs about $6,500 in our market. This three-ton system can drop down to its two-ton mode when the loads are lower (which is 90% of the time). It can also handle up to three zones; the low stage is called upon when only one or two zones need cooling. This is the minimum system we'll install if there is zoning in the mix.

Finally, at the top end is a system with a true variable-speed compressor as well as a variable-speed blower, such as the Bryant Evolution Extreme or the equivalent Carrier GreenSpeed. This equipment is rated at SEER 20 and goes in for about $9,000. These systems can dial way, way back to a whisper for low loads—low enough to handle a single small zone when needed. In summer, they'll run almost continuously—but so quietly that you barely notice them. They offer superb dehumidification. The system shown on this page is an equivalent Water Furnace geothermal unit.

Each step up delivers an improvement in comfort and in humidity control. In states like Florida, where electric rates are moderate, the energy savings associated with higher SEER ratings won't typically justify the investment as they might in a higher-priced power market. Still, the comfort gains and the reduced risk of moisture damage and mold are strong arguments in favor of the upgrades.

Curt Kinder runs Greener Solutions AC Services, in Jacksonville, Fla.

Training Agents to Grow Your Business

By: Jamison Krugger, Preferred Systems, Inc.

Editor's Note: Learn how holding informational classes for agents leads to referrals and growth.

An innovative marketing strategy helped transform a single-man home inspection business doing 110 inspections a year to a multi-inspector company with 10 inspectors, doing over 3,000 inspections per year. Here's the plan.

Jerry Linkhorn began his journey into the field of home inspection by working for a builder, doing quality control and structural inspections. He was responsible for completing foundation, framing and pre-drywall inspections for just over 800 homes per year. His responsibilities also included walking the buyer through the home and explaining how various things operated such as the furnace and water shutoffs. He maintained a detailed list for the superintendent of all the items that needed to be fixed before the buyer could move into the home. This job is what initially got him interested in home inspections.

In 1994 he began doing home inspections on the side. Jerry did about 30–50 inspections per year while running a framing business. He continued doing inspections as a side business until the market went bad in 2006. Jerry recalled a conversation with his wife where she told him that he needed to average nine inspections per week or over 10 times what he been doing, or he would have to find another job. At that time, he looked at her like she was crazy. Jerry knew that he needed to get serious about growing the business and he decided to get certified through the American Home Inspection Institute. After two weeks of training, he was certified and began his full-time home inspection career.

During his first four years as a full-time inspector, Jerry ran the company on his own with no employees and managed to gradually increase the total number of home inspections he did annually to 420.

As Jerry continued to grow his business, he realized that he was wearing too many hats. In addition to doing all the home inspections himself, he was answering phones, scheduling his

own inspections, sending out confirmation emails, setting up the inspection with listing agents, and other administrative tasks. He knew that if he was going to take his company to the next level, he needed to hire additional staff and spend more time focusing on marketing.

Jerry has always been serious about marketing and credits much of his success to Mike Crow, the founder and owner of Millionaire Inspector Community. After joining this group and implementing the marketing strategies that he learned, Jerry's business started growing faster than he could have ever imagined possible. He hired administrative staff to help him better manage the business as well as additional inspectors to handle the growth.

Jerry quickly realized that out of all the new marketing strategies that he had implemented in his business, the one that had the most significant impact and became the key to his success was doing office presentations for real estate agents. Most brokers set aside time each week to provide local businesses with an opportunity to come in to the office either for breakfast or lunch and give presentations to their agents. These office presentations, sometimes referred to as "Lunch & Learns," typically last anywhere from five to 20 minutes and focus on a wide range topics of interest to agents.

With over 250 home inspectors in his market, Jerry saw these presentations as a great opportunity to set his company apart from the competition and get his name out there. He began developing a series of presentations on various topics including Infrared Technology, Common Defects in the House, Winterization of the House, New Roof Technology, and New Methods in Mold Treatment. He started offering these presentations on a regular basis to as many broker offices as he could.

He knew that the best way for him to gain the respect and trust of more agents was to get in front of them in a room and showcase his knowledge regarding home inspections. These presentations resulted in a steady stream of ongoing home inspection referrals from agents.

While Jerry was happy to get in front of agents for five to 20 minutes, he knew that if he could get more time in front of them that he could greatly improve his results. While speaking to other inspectors from his marketing group, Jerry learned that some inspectors in other areas of the country were starting to teach continuing education courses on home inspection topics.

Offering Continuing Education

The idea of offering continuing education courses really piqued his interest. Jerry knew that real estate agents were required to have a specified number of continuing education credits every few years and if he could provide CE courses it would be of great value to agents. The CE courses could create opportunities for him to get more time in front of agents.

Jerry had no idea what the requirements are to get approved as an instructor in his state so he did a little research and realized that there was a pile of paperwork, substantial fees and ongoing administrative work required to set up and manage a continuing education program. Since this was outside of the scope of his home inspection business, he decided to put the idea on hold for some time.

In 2012 at one of Mike Crow's Platinum Group meetings Jerry was introduced to Mike Chevalier from Preferred Systems, Inc. PSI offers personalized educational programs to organizations

across the country and is approved by 47 certification boards to offer continuing education. After a quick discussion, Jerry learned that Preferred Systems was offering a program designed specifically for home inspectors and that they could manage his entire continuing education program for him. Preferred Systems handles all the instructor filings, course filings, and state reporting requirements. They also provide pre-approved courses on home inspection topics and provide access to an online portal which automates the entire registration process and simplifies everything for the agent.

Jerry immediately signed up with Preferred Systems and started notifying brokers that he could offer continuing education courses on various home inspection topics ranging from one to three hours. He received great feedback from brokers and they were surprised that a home inspection company could offer CE courses. He began using his office presentations to notify agents about his CE courses, which was a great way to follow-up with agents and get more time in front of them.

After several months of offering continuing education courses, Jerry noticed a significant increase in the number of referrals he was receiving from agents. At the end of each continuing education course he gave all the agents a coupon for $50 off an inspection which they could give to their clients. The coupon included the title of the CE course, the date, time and the name of the broker. This enabled Jerry to easily track the results of all his CE courses.

He compared the results of his office presentations to those of his CE courses and it wasn't even close. Each time he did an office presentation for 10 people, he would get an average of two coupons back. When he did a CE course for 10 people, he would receive an average of eight coupons back. For this reason, he refers to his CE courses as "Marketing Presentations on Steroids." Jerry directly attributes the extra time that he is spending with agents to the substantial increase in his referrals. Within a period of five years after he started offering CE courses, Jerry grew his business from 880 inspections a year to over 3,000 inspections. Jerry currently has a total of 14 employees including three full-time administrative and office staff members, a dedicated marketing representative and 10 full-time home inspectors.

He has also become a marketing coach and helps other home inspectors across the country grow their businesses using the same strategies he has learned over the last 10 years. The first thing that Jerry tells other inspectors is that they need to start doing presentations and implement a continuing education program as quickly as possible.

Jamison L. Krugger is the Director of Education Systems for Preferred Systems, Inc. and co-founder of the InspectionMarketer Program. The InspectionMarketer Program is a turn-key service that enables home inspection companies throughout the United States to establish and manage a continuing education program. Preferred Systems handles all the paperwork and administrative tasks including instructor filings, course filings, course offering notifications, credit filings for agents and ongoing customer support.

To learn more about the InspectionMarketer Program you can click HERE or call 888.455.7437.

DECKS

Common Deck Stair Defects

Build deck stairs according to best practices rather than code to protect your customers and avoid liability

BY BRUCE BARKER

As an ASHI home inspector, I inspect decks every day. Most have multiple defects, which is to be expected on older decks. But I also find serious problems with recently built decks, which is less understandable. In particular, I like to focus on stairs, because of the role they play in deck safety.

Indoors or out, stairs are one of the most dangerous systems anywhere in a building. Falls involving stairs can result in serious personal injury; that's where the big money is for attorneys. On a deck, stairs are third (behind ledger detachment and guard failures) in terms of number of injuries suffered.

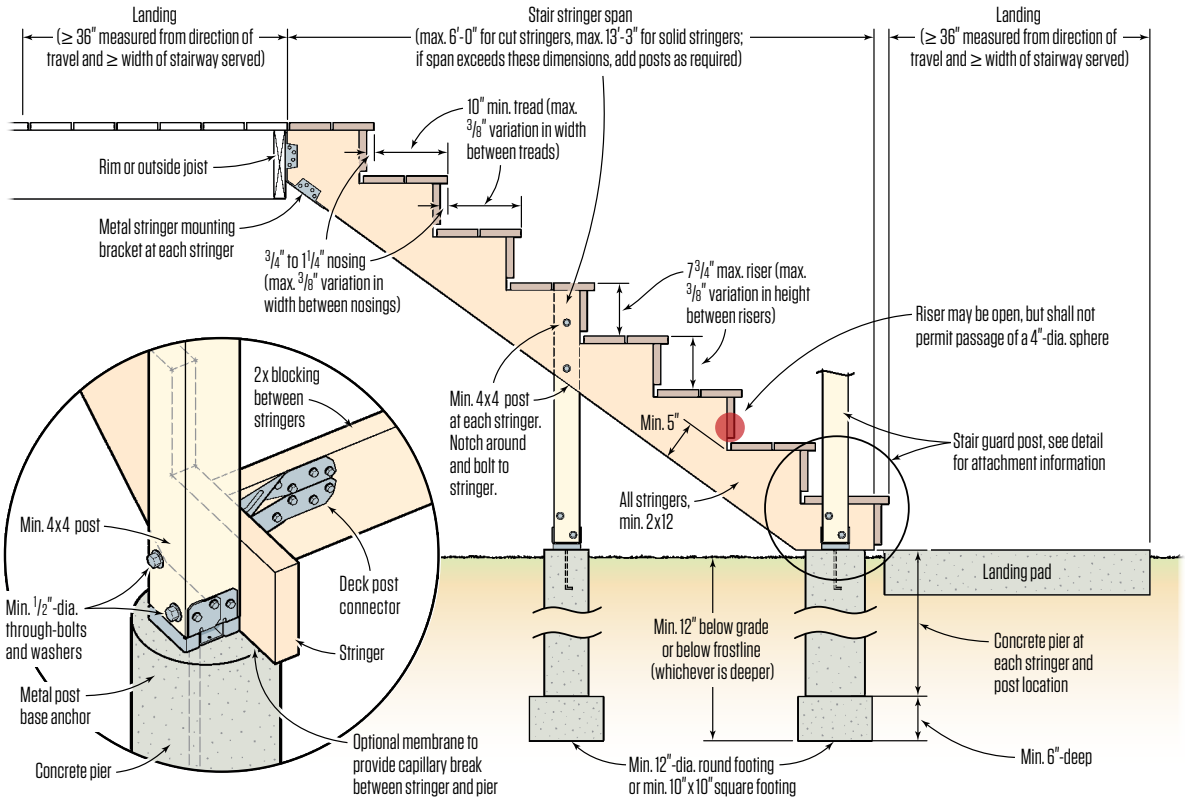
Photos by Bruce Barker

STAIRS BUILT RIGHT

Interior and exterior stairs share almost all of the same requirements. If anything, deck builders should be more careful about applying current safety and structural standards to exterior stairs because they are subject to environmental conditions that may exacerbate safety and structural problems.

But which standards apply? It's best to think of building codes as minimum standards, not as the standards for contractors who build quality decks. Keep in mind that even when a deck complies with a local building code, the code official who inspects it is not

Deck Stair Requirements



Shown here are DCA 6 recommended standards for deck stair stringers, risers, treads, and landings, and the components that support them. Note that in the stair example shown here, two posts and piers support each stringer; a typical 36-inch stair with three stringers requires six post and pier supports. Extending piers below frost depth is critical in cold climates where frost heave could lift the landing at grade. Wet and clayey soils are most at risk for substantial heave.

responsible for ensuring that the deck is safe.

To improve safety and to reduce liability risk, deck builders should follow current best practices as presented in the latest edition of DCA 6, the American Wood Council's *Prescriptive Residential Wood Deck Construction Guide*. Accordingly, I define "defect" as a failure to comply with these best practices. In fact, since a deck that passes local code inspection may still be unsafe, I believe that DCA 6 should be the standard to which all decks are built, regardless of what might be allowed by local building codes.

STRINGERS

Before getting into deck stair defects, let's look at how DCA 6 recommends that stairs should be built, starting with the stringers, risers, treads, and landings, and the components that support them (see "Deck Stair Requirements," above). When I'm evaluating a deck stair, this is where I start.

Stringers typically have two bearing points, with the plumb (vertical) cut bearing on a rim joist or on a beam, and the seat (horizontal) cut bearing on—at minimum—a solid landing. To help resist both vertical and lateral loads, stringers require proper support and attachment at these bearing points. Without proper support, vertical loads (gravity) can pull the stringers down from their bearing points, while lateral (horizontal) loads can pull the stringers away from their bearing points. Most builders worry more about vertical loads, but lateral loads are also a frequent cause of a deck stair failure: The fasteners withdraw from the bearing point, then gravity takes over.

Seat cut. DCA 6 recommends supporting the stringers using

All illustrations by Tim Healey

TOP ROW: The bottom of the stringer also needs adequate bearing: At least 1 1/2 inches of the heel of the seat cut should bear on the landing. This example **(1)** is prone to splitting along the grain. Stringers also require adequate bearing on either a rim joist or a dropped header. Without it, the stringer can split along the grain **(2, 3)**.
SECOND ROW: Fastening stringers with nails through the header into the end grain of a stringer **(4)** has minimal resistance to withdrawal. Toenailed stringers are less susceptible to withdrawal, but the connection can still fail as the framing ages and is structurally compromised **(5)**. At a cost of a few dollars each for the connectors and recommended fasteners, the most cost-effective way to hang a stringer is with metal hardware. But this one **(6)** has been installed incorrectly: The stringer isn't fully bearing on the connector seat. Another red flag: The fasteners are drywall screws instead of approved connector nails.

posts that bear on footings, but this is an installation detail that I can't recall ever seeing. If there is good stringer bearing on a solid landing, and if the stringers are restrained against lateral movement, I usually declare victory and move on. But I live in a warm climate, where we don't have to worry about frost heaves that could move the stringers and loosen the connection at the plumb cut. Those who build decks in cold climates should consider using the DCA 6 details.

It's best if the entire stringer seat cut bears on a solid landing, but at minimum, at least 1 1/2 inches of the seat-cut heel should bear on the landing. Allowing the toe of the seat cut to be the only part of the stringer that bears on the landing can cause the stringer to shear along the wood grain **(1)**.

Plumb cut. For maximum plumb-cut bearing and fastening area, the ideal stringer position has the top tread even with the deck flooring, which allows the stringer plumb cut to fully bear on the rim joist or beam. This location makes installing the stair guards and handrails more difficult, however, so it's more common to see the top tread dropped one riser below the deck flooring. Unfortunately, I've found that this often leads to unsafe attachment details with inadequate bearing that can allow the stringer to shear along the grain **(2, 3)**.

Stringer attachment. One of the most serious deck stair defects is a poor connection between the stringers and the deck. Failure at this important connection is common, particularly when the stringers have been nailed to the framing, because nails are subject to withdrawal.

For example, I often see stringers fastened to a dropped header

A 2x12 stringer has a maximum unsupported span of 6 feet. These stairs **(7)** are likely to deflect and cause the stringers to either pull loose from the framing or shear along the grain. The problem is made worse with overcut notches, which weaken a stringer **(8)**. The minimum recommended depth of the uncut portion of the stringer is 5 inches, as measured to the closest saw kerf and not the notch itself. Shown in the illustration on the facing page are the recommended standards for deck stair guards, which are subject to the same requirements as interior stairs.

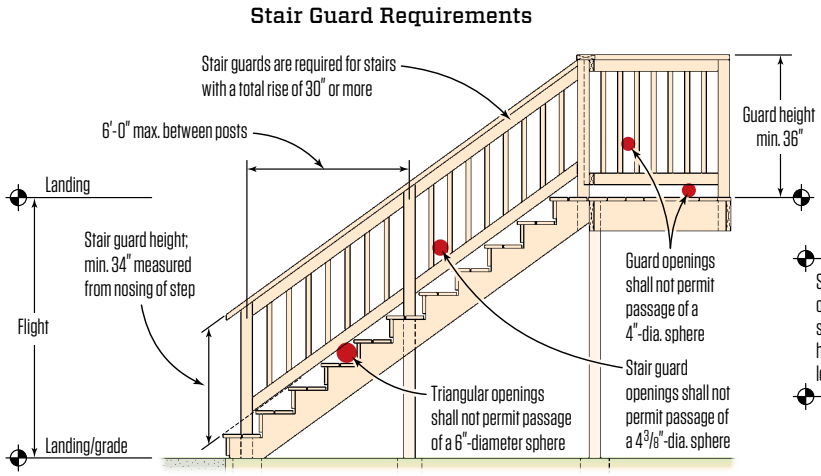
with nails driven into the stringers' end grain **(4)**. If the stringers are also bearing on—but not attached to—a landing and have no other attachment to resist lateral loads, the nails will do little to prevent the stringers from pulling away from the framing. If the stringers are bearing on the ground, the problem is even worse.

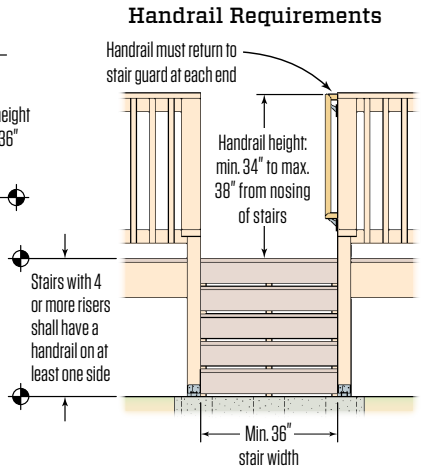
Sometimes the stringers are toenailed to the deck framing **(5)**, an attachment method where the nails aren't quite as subject to withdrawal. Sometimes this method works—if an adequate quantity of the correct kind of nails is properly installed (there are rules about how to correctly install toenails), and if the wood and the nails maintain their integrity over the life of the deck. That is a lot of ifs.

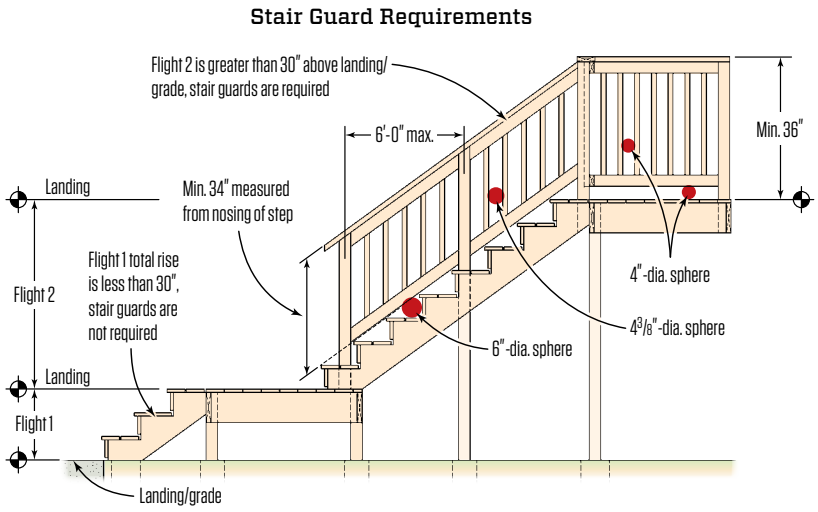
To avoid extra work and eliminate drop headers, end-nailing, toenailing, and other questionable stringer connection methods, DCA 6 recommends the use of metal hardware specifically designed for stringers, such as Simpson Strong-Tie's LSCZ or LSSU connectors. At a cost of a few dollars each for the connectors and recommended fasteners, this is the most cost-effective stringer connection method.

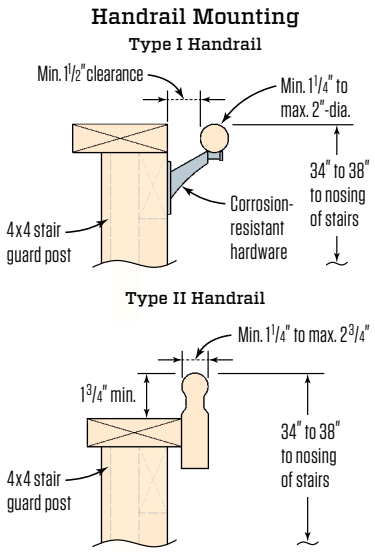
But in order to provide both the vertical and lateral support for the stringers, these connectors must be installed according to manufacturer's instructions. For example, stringers should fully bear on the connector seats. Screws are not allowed—unless specifically allowed by manufacturer's instructions, and then only manufacturer-supplied screws may be used. Deck screws and drywall screws are not allowed **(6)**. Finally, the round and oblong holes are there for a reason: They are saying, "Put a fastener here."

Stringer construction. Almost all stringers on deck stairs are









cut stringers. The two most common cut-stringer defects that I see are overspanning and overcutting.

The minimum recommended size for a deck stair stringer is 2x12, which has a maximum recommended unsupported span of 6 feet. Often this maximum span is dangerously exceeded, resulting in overspanned stringers that will deflect and cause the connection at the deck to pull loose and fail. In some cases, overspanned stringers may shear along the wood grain **(7)**.

The minimum recommended depth of the uncut portion of the stringer is 5 inches. The measurement is to the saw kerf, and it's common to find stringers with dangerously overcut notches **(8)**. Stringers that are overcut have the same potential failures as overspanned stringers. In both cases, they can be repaired by installing intermediate support posts.

RISERS AND TREADS

In both DCA 6 and the 2015 IRC, requirements for riser height and tread depth are 7 3/4 inches (max.) and 10 inches (min.) respectively, though local requirements vary. These measurements are taken at the leading edge of the treads.

To me, the more important safety issue is that the riser heights and tread depths be uniform. Risers or treads that vary more than 3/8 inch between any two risers or treads create a fall hazard, because people become accustomed to a certain feel when using stairs. A variance can cause someone to lose balance and fall. The most common location for a large variance between riser heights is at landings.

Many deck builders seem to be unaware that open risers allowing a 4-inch-diameter sphere to pass through are not permitted on

Though common, 2x4 handrails **(9)** are not considered graspable and should be avoided. Bottom guard rails on stairs should be oriented close enough to the tread nosings so that a 6-inch-diameter sphere will not pass through the triangle created by the riser, tread, and rail **(10)**. Wooden stair guard posts should be located so that the span between posts (as measured horizontally) is no more than 6 feet. This is a new deck stair that passed inspection **(11)**.

stairs that are more than 30 inches above grade (or the floor below). This is a common defect in older decks, but I often find it on newer decks too.

HANDRAILS

Like deck stair guards, deck stair handrails share the same requirements as for interior stairs, including requirements for a graspable shape and termination in a post or a return. This means that very few deck handrails comply with code or best practices, including those with typical 2x4 and 5/4 rail caps **(9)**. A 2x4 handrail is not graspable, especially by children and others with small hands, the elderly, and those with impaired mobility—the people who need a safe, graspable handrail the most.

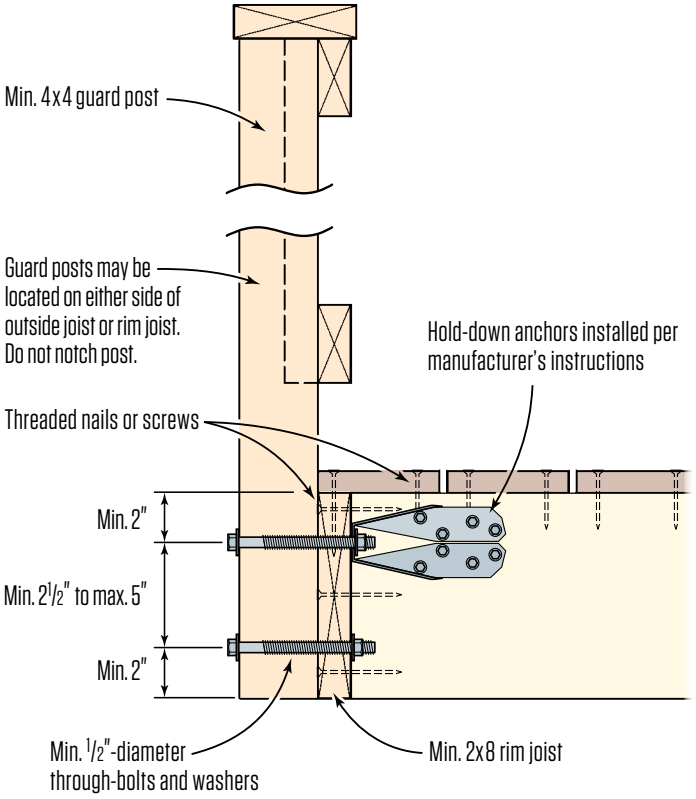
Deck stair handrails should also be continuous from above the top tread or landing to above the last tread in the flight of stairs, and terminate in a return or into a support post. If the guard is properly installed otherwise (which it often isn't), the easiest fix for most handrail problems is to install a separate graspable handrail.

GUARDS

Guards for deck stairs share the same requirements as guards for interior stairs (see "Stair Guard Requirements," page 45). Two of the more common stair-guard defects I see include failing to install vertical infill components so that a 4 3/8-inch-diameter sphere will not pass through, and failing to install the guard bottom rail so that a 6-inch-diameter sphere will not pass through the triangle created by riser, tread, and guard bottom rail **(10)**.

In addition, 4x4 wood support posts for stair guards should be

Guard Post Fastening



A strong connection between guard posts and deck framing is critical to deck safety. The illustration (above left) shows an example of a connection made with a metal hold-down anchor, and details the other DCA 6 fastening requirements for guard posts. Above all, avoid notched posts **(12)**, which may develop cracks originating in the corner of the notch and running parallel to the grain, which weakens the post.

installed so that they are no more than 6 feet apart. Post spacing must be measured horizontally, not along the length of the guard.

Guard posts must be able to withstand a 200-pound load in any direction. The easiest way to comply with this requirement is to install hold-down connectors, especially at the top of the stairs, following the manufacturer's instructions (see "Guard Post Fastening," above).

Posts should never be notched around the framing, because that practice increases the odds that the post will develop cracks that originate in the corner of the notch and run parallel to the grain, weakening the post **(12)**.

If the bottom guard post extends below grade and also supports the stair stringer, a pair of ½-inch-diameter hot-dipped galvanized machine bolts (not carriage bolts) with washers on each end can be used to fasten the post to the stringer. This same detail can be used with intermediate stair guard posts.

LANDINGS

A solid landing, at least as wide as the stairs and at least 36 inches deep in the direction of travel, should be located at the top and bottom of each flight of stairs. A flight of stairs should not rise vertically more than 147 inches without a landing. An intermediate landing is a small deck, and should be built as such, including appropriate footings, posts, and bracing.

Bruce Barker is a licensed contractor and certified ICC inspector. He owns Dream Home Consultants, in Cary, N.C. A version of this article originally appeared in Professional Deck Builder.

Agency
Department of Consumer Protection

Subject
Home Inspectors

Inclusive Sections
§§ 20-491-1—20-491-28

CONTENTS

Home Inspector Interns

Home Inspectors

Sec. 20-491-1. Definitions

As used in sections 20-491-1 to 20-491-26, inclusive, of the Regulations of Connecticut State Agencies:

(1) "Alarm systems" means warning devices, installed or free-standing, including but not limited to: carbon monoxide detectors, flue gas and other spillage detectors, security equipment, ejector pumps and smoke alarms;

(2) "Architectural service" means "the practice of architecture" or "practice architecture" as defined in Section 20-288(3) of the Connecticut General Statutes;

(3) "Automatic safety controls" means devices designed and installed to protect systems and components from unsafe conditions;

(4) "Component" means a part of a system;

(5) "Decorative" means ornamental; not required for the operation of the essential systems and components of a home;

(6) "Describe" means to report a system or component by its type or other observed, significant characteristics to distinguish it from other systems or components;

(7) "Dismantle" means to take apart or remove any component, device or piece of equipment that would not be taken apart or removed by a homeowner in the course of normal and routine home owner maintenance;

(8) "Engineering service" means services offered by a "professional engineer" as defined in Section 20-299(1) of the Connecticut General Statutes;

(9) "Further evaluation" means examination and analysis by a qualified professional, tradesperson or service technician beyond that provided by the home inspection;

(10) "Household appliances" means kitchen, laundry, and similar appliances, whether installed or free-standing;

(11) "Inspect" means to examine readily accessible systems and components of a building in accordance with home inspection statutes and sections 20-491-1 to 20-491-26, inclusive, of the Regulations of Connecticut State Agencies, using normal operating controls and opening readily accessible panels;

(12) "Installed" means attached such that removal requires tools;

(13) "Normal operating controls" means devices such as thermostats, switches or valves intended to be operated by the homeowner;

(14) "Readily accessible" means available for visual inspection without requiring moving of personal property, dismantling, destructive measures, or any action which will likely involve risk to persons or property;

(15) "Readily openable access panel" means a panel provided for homeowner inspection and maintenance that is within normal reach, can be removed by one person, and is not sealed in place;

(16) "Recreational facilities" means spas, saunas, steambaths, swimming pools, exercise, entertainment, athletic, playground or other similar equipment and associated accessories;

(17) "Report" means to communicate in writing;

(18) "Representative number" means one component per room for multiple similar interior components such as windows and electric outlets; one component on each side of the building for multiple similar exterior components;

(19) "Roof drainage systems" means components used to carry water off a roof and away from a building;

(20) "Significantly deficient" means unsafe or not functioning;

(21) "Shut down" means a state in which a system or component cannot be operated by normal operating controls;

(22) "Solid fuel burning appliances" means a hearth and fire chamber or similarily prepared place in which a fire may be built and which is built in conjunction with a chimney; or a listed assembly of a fire chamber, its chimney and related factory-made parts designed for unit assembly without requiring field construction;

(23) "Structural component" means a component that supports non-variable forces or weights (dead loads) and variable forces or weights (live loads);

(24) "System" means a combination of interacting or independent components, assembled to carry out one or more functions;

(25) "Technically exhaustive" means an investigation that involves dismantling, the extensive use of advance techniques, measurements, instruments, testing, calculations or other means;

(26) "Under-floor crawl space" means the area within the confines of the foundation and between the ground and the underside of the floor;

(27) "Unsafe" means a condition in a readily accessible, installed system or component that is judged to be a significant risk of personal injury during normal, day-to-day use. The risk may be due to damage, deterioration, improper installation or a change in accepted residential construction standards; and

(28) "Wiring methods" means identification of electrical conductors or wires of the general type, such as "non-metallic sheathed cable" ("Romex"), "armored cable" ("bx") or "knob and tube."

(Adopted effective July 30, 2002)

Sec. 20-491-2. Purpose and scope

(a) The purpose of these regulations is to establish a minimum and uniform standard for the home inspector who provides or offers to provide a home inspection.

(b) The inspector shall inspect readily accessible systems and components of homes and installed systems and components of homes.

(c) The inspector shall report on those systems and components inspected which, in the professional opinion of the inspector, are significantly deficient or are near the end of their service lives.

(d) The inspector shall provide a reason why, if not self-evident, the system or component is significantly deficient or near the end of its service life and the inspector shall provide recommendations to correct or monitor the reported deficiency.

(e) The inspector shall report on any systems and components designated for inspection in these regulations which were present at the time of the home inspection, unless a written reason is provided as to why any such systems or components were not inspected.

(f) These regulations are not intended to limit the inspector from including other inspection services, systems or components in addition to those required by these regulations; from specifying repairs, provided the inspector is appropriately qualified and willing to do so; and from excluding systems and components from the inspection if requested by the client.

(Adopted effective July 30, 2002)

Sec. 20-491-3. Structural system

(a) The inspector shall inspect the structural components including foundations and framing.

(b) The inspector shall probe a representative number of structural components where deterioration is suspected or where clear indications of possible deterioration exist. Probing is not required when probing would damage any finished surface or where no deterioration is visible.

(c) The inspector shall describe the foundation and report the methods used to inspect the under-floor crawl space or basement area; the floor structure; the wall structure; the ceiling structure; and the roof structure and report the methods used to inspect the attic.

(d) The inspector is not required to provide any engineering service or provide architectural service.

(Adopted effective July 30, 2002)

Sec. 20-491-4. Exterior

(a) The inspector shall inspect the exterior wall covering, flashing and trim; all exterior doors; attached decks, balconies, stoops, steps, porches, and their associated railings; the eaves, soffits, and fascias where accessible from the ground level; the vegetation, grading, surface drainage, and retaining walls on the property when any of these are likely to adversely affect the building; and walkways, patios, and driveways leading to dwelling entrances.

(b) The inspector shall describe exterior wall covering, finishing and trim.

(c) The inspector is not required to inspect screening, shutters, awnings, and similar seasonal accessories; fences; geological, geotechnical or hydrological conditions; recreational facilities; outbuildings; seawalls, break-walls, and docks; or erosion control and earth stabilization measures.

(Adopted effective July 30, 2002)

Sec. 20-491-5. Roof system

(a) The inspector shall inspect the roof covering; the roof drainage systems; the flashings; the skylights, chimneys, and roof penetrations.

(b) The inspector shall describe the roof covering and report the methods used to inspect the roof.

(c) The inspector is not required to inspect antennae, interiors of flues or chimneys which are not readily accessible or other installed accessories.

(Adopted effective July 30, 2002)

Sec. 20-491-6. Plumbing system

(a) The inspector shall inspect the interior water supply and distribution systems, including all fixtures and faucets; the drain, waste and vent systems, including all fixtures; the water heating equipment; the fuel storage and fuel distribution systems; and the drainage sumps, sump pumps, and related piping.

(b) The inspector shall describe the water supply, drain, waste, and vent piping materials; if the water supply to the building is from an on-site well pump system, then the inspector shall describe the visible components of that system, the water heating equipment including the energy source; and the location of main water and main fuel shut-off valves.

(c) The inspector is not required to inspect the clothes washing machine connections; wells, well pumps, or water storage related equipment; water conditioning systems; solar water heating systems; fire and lawn sprinkler systems; or private waste disposal systems.

(d) The inspector is not required to determine whether water supply and waste disposal systems are public or private or the quantity or quality of the water supply, well yields, well pump longevity, or the internal condition of water storage equipment.

(e) The inspector is not required to operate safety valves or shut-off valves.

(Adopted effective July 30, 2002; Amended March 7, 2008)

Sec. 20-491-7. Electrical system

(a) The inspector shall inspect the service drop; the service entrance conductors, cables, and raceways; the service equipment and main disconnects; the service grounding; the interior components of service panels and sub panels; the conductors; the overcurrent protection devices; a representative number of installed lighting fixtures, switches, and receptacles; and the ground fault circuit interrupters.

(b) The inspector shall describe the amperage and voltage rating of the service; the location of main disconnect or disconnects and sub panels; and the wiring methods.

(c) The inspector shall report on the presence of solid aluminum branch circuit wiring.

(d) The inspector shall report on the absence of smoke detectors.

(e) The inspector is not required to inspect the remote control devices unless the device is the only control device, the alarm systems and components, the low voltage wiring systems and components, or the ancillary wiring systems and components not a part of the primary electrical power distribution system.

(f) The inspector is not required to measure amperage, voltage, or impedance.

(Adopted effective July 30, 2002)

Sec. 20-491-8. Heating system

(a) The inspector shall inspect the installed heating equipment and the vent systems, flues and chimneys.

(b) The inspector shall describe the energy source and the heating method by its distinguishing characteristics.

(c) The inspector is not required to inspect the interiors of flues or chimneys which are not readily accessible, the heat exchanger, the humidifier, dehumidifier, the electronic air filter, or the solar space heating system.

(d) The inspector is not required to determine heat supply adequacy or distribution balance.

(Adopted effective July 30, 2002)

Sec. 20-491-9. Air conditioning systems

(a) The inspector shall inspect the installed central and through-wall cooling equipment.

(b) The inspector shall describe the energy source and the cooling method by its distinguishing characteristics.

(c) The inspector is not required to inspect electronic air filters or determine cooling supply adequacy or distribution balance.

(Adopted effective July 30, 2002)

Sec. 20-491-10. Interior

(a) The inspector shall inspect the walls, ceilings, and floors; the steps, stairways, and railings; the countertops and a representative number of installed cabinets; a representative number of doors and windows; and garage doors and garage door operators.

(b) The inspector is not required to inspect the paint, wallpaper, and other finish treatments; the carpeting; the window treatments; the central vacuum systems; the household appliances; or recreational facilities.

(Adopted effective July 30, 2002)

Sec. 20-491-11. Insulation and ventilation

(a) The inspector shall inspect the insulation and vapor retarders in unfinished spaces; the ventilation of attics and foundation areas; and the mechanical ventilation systems.

(b) The inspector shall describe the insulation and vapor retarders in unfinished spaces and the absence of insulation in unfinished spaces at conditioned surfaces.

(c) The inspector is not required to disturb insulation or vapor retarders or determine indoor air quality.

(Adopted effective July 30, 2002)

Sec. 20-491-12. Fireplaces and solid fuel burning appliances

(a) The inspector shall inspect the system components and the vent systems, flues, and chimneys.

(b) The inspector shall describe the fireplaces, solid fuel burning appliances and the chimneys.

(c) The inspector is not required to inspect the interiors of flues or chimneys, the firescreens and doors, the seals and gaskets, the automatic fuel feed devices, the mantles and fireplace surrounds, the combustion make-up air devices, or the heat distribution assists, whether gravity controlled or fan assisted.

(d) The inspector is not required to ignite or extinguish fires, determine draft characteristics, or move fireplace inserts or stoves or firebox contents.

(Adopted effective July 30, 2002)

Sec. 20-491-13. General limitations and exclusions

(a) Inspections performed in accordance with these regulations are not technically exhaustive. The inspector is not required to identify concealed conditions or latent defects.

(b) These regulations shall be applicable to buildings with four or fewer dwelling units and their attached garages or carports.

(c) The inspector is not required to perform any action or make any determination unless specifically stated in these regulations, except as may be required by lawful authority.

(d) The inspector is not required to determine the following:

(1) the condition of systems or components which are not readily accessible;

(2) the remaining life of any system or component;

(3) the strength, adequacy, effectiveness, or efficiency of any system or component;

(4) the causes of any condition or deficiency;

(5) the methods, materials, or costs of corrections;

(6) future conditions, including, but not limited to, failure of systems or components;

(7) the suitability of the property for any specialized use;

(8) compliance with regulatory requirements (codes, regulations, laws or ordinances);

(9) the market value of the property or its marketability;

(10) the advisability of the purchase of the property;

(11) the presence of potentially hazardous plants or animals, including, but not limited to, wood destroying organisms or diseases harmful to humans;

(12) the presence of any environmental hazards, including, but not limited to, toxins, carcinogens, noise, contaminants in soil, water, and air, radon, mold, asbestos, lead paint, or lead solder;

(13) the effectiveness of any system installed or methods utilized to control or remove suspected hazardous substances;

(14) the operating costs of systems or components; or

(15) the acoustical properties of any system or component.

(e) Any services not required under Sections 20-491-1 to 20-491-14 of the Regulations of Connecticut State Agencies may be offered by the home inspector as an optional service or provided at the request of the client.

(f) The inspector is not required to perform engineering services, or perform work in

any other trade or any professional service other than home inspection.

(g) The inspector is not required to operate: (1) any system or component which is shut down or otherwise inoperable, (2) any system or component which does not respond to normal operating controls, or (3) shut-off valves.

(h) The inspector is not required to enter or inspect: (1) any area which will (A) likely be dangerous to the inspector or other persons or (B) damage the property or its systems or components or (2) under-floor crawl spaces or attics which are not readily accessible.

(i) The inspector is not required to inspect: underground items, including, but not limited to, underground storage tanks or other underground indications of their presence; decorative items; systems or components located in areas that are not entered in accordance with these regulations; detached structures other than garages and carports; or common elements or common areas in multi-unit housing, such as condominium properties or cooperative housing.

(j) The inspector is not required to perform any procedure or operation which requires the inspector to move suspended ceiling tiles, personal property, furniture, equipment, plants, soil, snow, ice, or debris; or dismantle any system or component, except as explicitly required by these regulations.

(Adopted effective July 30, 2002; Amended April 17, 2017)

Sec. 20-491-14. Code of ethics

(a) Opinions expressed by the inspector shall only be based on the inspector's education, experience and honest convictions.

(b) The inspector shall always act in good faith toward each client.

(c) The inspector shall not disclose any information concerning the results of the inspection without the approval of the client or such client's representative unless the inspector finds that public health, safety or welfare imperatively requires emergency action.

(d) The inspector shall not accept compensation, financial or otherwise, from more than one interested party for the same service without the consent of all interested parties.

(e) The inspector shall not accept or offer commissions or allowances, directly or indirectly, from other parties dealing with such inspector's client in connection with work for which the inspector is responsible.

(f) Prior to being retained, the inspector shall promptly disclose to his or her client any interest or conflict of interest which may affect the client.

(g) The inspector shall not allow an interest in any business to affect the quality or the results of the work which the inspector may be called upon to perform.

(h) The inspection work shall not be used as a vehicle for the inspector to deliberately obtain work in another field.

(i) The inspector shall make every effort to uphold, maintain, and improve the professional integrity, reputation, and practice of the home inspection profession.

(j) The inspector shall not engage in false or misleading advertising or otherwise misrepresent any matters to the public.

(k) No inspector shall express, within the context of an inspection, an appraisal or opinion of the market value of the inspected property.

(*l*) The inspector shall not discriminate against anyone on the basis of age, creed, color, sex, sexual orientation, physical or mental handicap, or national origin.

(Adopted effective July 30, 2002)

Sec. 20-491-15. Schools, institutions or organizations

(a) Each school, institution or organization, desirous of offering approved home inspection courses shall submit a formal filing for each course seeking approval with the Home Inspection Licensing Board.

(b) Each school, institution or organization seeking approval of its home inspection courses shall offer to the general public at least one course required to meet the minimum qualifications. These shall include, but not be limited to, the following: A home inspection principles and practices course consisting of not less than forty classroom hours of study.

(Adopted effective July 30, 2002)

Sec. 20-491-16. Course filing requirements

(a) The filing for each course shall include, but not be limited to, the following: (1) A copy of the detailed course outline; (2) a copy of the instructor lecture guidelines; (3) copy of the text and related teaching materials; (4) copy of the final examination; (5) copy of any quizzes; (6) grading system; (7) a copy of affidavits and certificates to be issued by the school, institution or organization upon completion of the course other than that prescribed by the Home Inspection Licensing Board; (8) copy of all proposed advertising and publicity; (9) seminars and indoctrination attended by instructors; (10) locations of all classrooms; and (11) names and addresses of all instructors to be used; and (12) the dollar amount of tuition and other related costs.

(b) No course of less than one (1) hour will be approved.

(c) Correspondence courses may be permitted for continuing education credit.

(d) Each school, institution or organization shall submit an updated course filing containing any changes from the previous offering within each two year period from original approval date.

(Adopted effective July 30, 2002)

Sec. 20-491-17. Intern training program

The board-approved training program, known as the Home Inspection Intern Training Program, shall consist of a minimum of forty hours of instruction and shall include, but not be limited to, the following subject matter: (1) General home inspection; (2) Connecticut home inspection license law and regulations; (3) specialized areas of home inspection practice; and (4) business law.

(Adopted effective July 30, 2002)

Sec. 20-491-18. Advertising guidelines

(1) All advertising and written or oral statements shall avoid the use of exaggerated or unprovable claims and misrepresentations. In discussing the student's possible or potential economic future in the field of home inspection, no misleading or deceptive claims shall be made.

(2) In any advertising, no school, institution or organization shall use the wording "Approved by the Home Inspection Licensing Board," or other like wording. The following wording may be used: "This course meets the minimum requirements as set forth by the Home Inspection Licensing Board."

(Adopted effective July 30, 2002)

Sec. 20-491-19. Affidavit or certificate requirements for pre-licensing courses

No affidavit or certificate of successful completion of an approved pre-licensing course of study in home inspection shall be issued to any student unless said student shall have first attended a minimum of forty hours of instruction and shall have achieved a passing numerical grade of at least seventy per cent on a final examination. Each school, institution or organization shall issue an affidavit to the student in such form as may be adopted by the school, institution or organization attesting to the required minimum attendance, dates of attendance and final numerical grade for the course. Said affidavit shall be signed by an authorized official of the school, institution or organization.

(Adopted effective July 30, 2002)

Sec. 20-491-20. Course and location approval by the Home Inspection Licensing Board

(a) Each school, institution or organization conducting an approved course shall, at least ten days prior to the first scheduled session of each course, submit to the Home Inspection Licensing Board a schedule of the dates, hours, locations, tuition fees, advertising and instructors for each course to be offered. No courses shall commence, or be advertised as approved, nor shall an instructor be used in the classroom, without prior written approval of the Home Inspection Licensing Board. There shall be no change or alteration in any approved course or instructional staff without prior written notice and approval of the Home Inspection Licensing Board. Course approval may be withdrawn for failure to comply with the provisions of sections 20-491-15 through 20-491-26 of the Regulations of Connecticut State Agencies.

(b) Each school, institution or organization shall submit to the Home Inspection Licensing Board for prior approval a listing identifying all locations where courses are offered. Each course of study shall be conducted in a classroom or other facility which is adequate to implement the offering. Approved courses shall not be held on the premises of a home inspection office or home inspection franchise. No classroom location shall be approved by the Home Inspection Licensing Board until it has been approved by the local

fire marshal for such use.

(Adopted effective July 30, 2002)

Sec. 20-491-21. Records

(a) Each school, institution or organization conducting approved courses shall keep and retain complete records of student attendance, grades or evidence of completion for a period of at least three years after the completion of each course. Such records shall be available for inspection or audit by representatives of the Home Inspection Licensing Board or the department. Upon satisfactory completion of any approved course, the school, institution or organization shall furnish a certificate or affidavit, as applicable, to the student, as prescribed by the Home Inspection Licensing Board.

(b) The burden of proof of completion of each course shall be upon the licensee. Documentation of such courses shall be submitted in such manner and at such times as prescribed by the Home Inspection Licensing Board.

(Adopted effective July 30, 2002)

Sec. 20-491-22. Home Inspection Licensing Board and department audits

The Home Inspection Licensing Board or the department may, without prior notice, visit the school and observe the instruction given to insure proper standards as to method of delivery and instruction and to confirm content of any approved courses.

(Adopted effective July 30, 2002)

Sec. 20-491-23. Course content

(a) The contents of pre-licensing courses or continuing education programs shall consist of current home inspection licensing laws and practices that are broad-based and essential to the role of a home inspection general practitioner as he or she acts in the best interests of the consumer. The contents shall directly relate to home inspection principles and practices as described in sections 20-491-1 to 20-491-14, inclusive, of the Regulations of Connecticut State Agencies and to any overview text on home inspection principles and practices or to new developments in the fields for which licensees have a demonstrated need.

(b) The home inspector shall take courses consisting of at least twenty continuing education hours in each two year continuing education period. For each two year continuing education period, the following course shall be mandated: One course consisting of at least three classroom hours in current home inspection legislation, licensing laws and regulations.

(c) The Home Inspection Licensing Board shall not approve offerings in mechanical office and business skills such as typing, speed-reading, memory development, personal motivation, salesmanship, sales psychology, sales promotions or other meetings held in conjunction with the general business of a home inspector. Generally acceptable courses may include, but shall not be limited to:

1) Laws and regulations pertaining to the home inspection licensing profession;

2) structural systems;

3) foundations;
4) interior walls, doors, ceilings and floors;
5) exterior walls and doors, windows and door glazing;
6) fireplace and chimney;
7) roof, roof structure and attic;
8) porches and decks;
9) mechanical systems (heating, cooling and solar work);
10) inspection guidelines for appliances;
11) inspection guidelines for cooling systems other than evaporative coolers;
12) inspection guidelines for evaporative coolers;
13) inspection guidelines for heating systems;
14) inspection guidelines for ducts, vents (including dryer vents) and flues;
15) plumbing systems (drain, waste, vent, water and gas);
16) inspection guidelines for plumbing systems;
17) electrical systems (for heat, light, power and other purposes);
18) telecommunications, data, low voltage systems;
19) service entrance and panels;
20) branch circuits, connected devices and fixtures;
21) home inspection documents, forms, contracts and warrantees;
22) water supply (drilled wells/community water supplies);
23) fire protection sprinkler systems;
24) rodents, pests and insects; and
25) environmental contaminants, such as radon, asbestos, lead paint, or lead solder, and other related courses which may be acceptable to the Home Inspection Licensing Board.

(d) Courses completed prior to certification by the Home Inspection Licensing Board may not qualify for continuing education hours.

(e) Continuing education hour credits shall not be approved more than once for completing the same course within each two year continuing education period.

(Adopted effective July 30, 2002)

Sec. 20-491-24. Hardship

(a) Upon appropriate showing of a bona fide health or other individual hardship, the Home Inspection Licensing Board may grant an exception to the continuing education requirements.

(b) Loss of income resulting from cancellation of a license is not a bona fide hardship.

(c) Requests for exceptions shall be submitted in writing not less than sixty days prior to the date of license renewal and shall include an explanation and verification of the hardship.

(d) Exceptions may include, but are not be limited to: (1) Individuals serving in military service; and (2) individuals who are physically handicapped, which handicap prohibits them

from sitting for an exam or attending courses.

(Adopted effective July 30, 2002)

Sec. 20-491-25. Hearings on refusal of school or course approval

(a) Upon the refusal of the Home Inspection Licensing Board to approve a school, institution or organization for the offering of continuing education courses or a particular course, or upon the decision of the Home Inspection Licensing Board to withdraw such approval, the Home Inspection Licensing Board shall notify the applicant of the refusal and of such applicant's right to request a hearing within thirty days from the date of receipt of the notice of refusal.

(b) In the event the applicant requests a hearing within such thirty days, the Home Inspection Licensing Board shall give notice of the grounds for its refusal and shall conduct a hearing concerning such refusal in accordance with the provisions of Chapter 54 of the Connecticut General Statutes concerning contested matters.

(Adopted effective July 30, 2002)

Sec. 20-491-26. Applications

The applications for licensure, school approval and pre-licensing courses shall be made on forms prescribed and furnished by the Department of Consumer Protection.

(Adopted effective July 30, 2002)

Home Inspector Interns

Sec. 20-491-27. Home inspector intern requirements

(a) No more than two home inspector interns may be under the direct or indirect supervision of a licensed home inspector at any one site.

(b) All home inspector interns shall maintain a record in the form of a home inspection log prior to beginning and until completion of their service contract with each supervising home inspector.

(c) A copy of the home inspection log maintained by the intern shall also be kept by the supervising home inspector and shall, at a minimum, include the following information for each inspection: (1) Client name; (2) address of the property inspected; (3) description of the areas inspected; (4) indication of whether the supervision was either direct or indirect in nature; (5) date of the inspection; and (6) supervisor's initials and license number.

(Adopted effective February 1, 2006)

Sec. 20-491-28. Supervision of home inspector interns

(a) While performing inspection work, all home inspector interns shall be subject to supervision by a home inspector licensed pursuant to section 20-492a of the Connecticut General Statutes.

(b) The supervising licensed home inspector shall be responsible for the direct

supervision of at least ten of the intern's home inspections.

(c) "Direct supervision" means the supervising licensed home inspector must be physically present and witness the home inspector intern conducting the home inspection in accordance with subsection (c) of section 20-493b of the Connecticut General Statutes.

(d) No more than one home inspector intern may be present during the direct supervision requirement period at any one site.

(e) Only one intern may receive credit towards the one hundred inspections requirement for any home inspection conducted at any one site.

(f) The supervising licensed home inspector shall:

(1) Accept legal responsibility for all home inspection work performed by such intern, including all resulting written inspection reports, inspection review reports, consulting reports and work product by signing and certifying that each report has been reviewed and is in compliance with sections 20-491-1 to 20-491-28 of the Regulations of Connecticut State Agencies;

(2) Review all aspects of the home inspector intern's inspection reports, inspection review reports, consulting reports, or work product;

(3) Inspect each residential property with the home inspector intern until completion of the ten home inspections required to be directly supervised have been completed in accordance with the competency provision of sections 20-491-1 to 20-491-28 of the Regulations of Connecticut State Agencies;

(4) Sign the home inspection log at the completion of each inspection performed by the home inspection intern;

(5) Maintain a separate copy of each home inspection log completed by each home inspector intern;

(6) Provide, upon request, the home inspector intern with copies of the inspection reports that the home inspector intern prepared;

(7) Sign a notification to the Board of the supervision of the home inspector intern. By signing the notification of supervision, the licensed home inspector agrees to assume the responsibilities and duties of a supervising home inspector as provided in chapter 400f of the Connecticut General Statutes and sections 20-491-1 to 20-491-28, inclusive, of the Regulations of Connecticut State Agencies; and

(8) Cooperate with the department regarding matters related to all regulated activities.

(Adopted effective February 1, 2006)

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		They have served as our primary leaders and in other capacities since 1992. Please thank them for their service when you have a chance.		

The Licensing Board meetings are held at 9:30 am
Dept of Consumer Protection
165 Capitol Avenue. Hartford

The public is always welcome.

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