

BOAT News

a publication by the BUILDING OFFICIALS ASSOCIATION OF TEXAS



PRESIDENT'S MESSAGE



I would first like to say thank you!! Yes!! Thanks to YOU for being a part of this Chapter, the ICC Chapter I know to be the best in the Country. We, BOAT, have been so very fortunate to be a leader nationally; we continue to display our commitment to further the ICC model and to promote safety in the built environment. The Board, your Board, would like to help you to do your job more effectively. In order for us to maximize our efforts, we need you to continue to contribute. Let us know how we are doing, what more we can do for you and to ensure we move in the right direction.

When I took office as President in 2009, the Board established Strategic Goals for 2010-2012. As we have moved through the year, we have made significant changes with the focus of continuous improvement. Some of the positive changes that have already taken place include:

- BOAT Codes and Standards Training---educational opportunities brought TO our local Chapters (we are currently scheduling multiple TDLR Accessibility programs across the state. See the "Mobile Training" article in this newsletter and watch the BOAT website for more information)
- BOAT Board meetings at both BPI Arlington and Houston, with a BOAT booth for our members
- BOAT fall conferences rotating around the State to seek greater involvement Statewide
- Disaster Recovery Team Initiative---providing a network of Texas code officials as needed in a time of crisis

These are a few of the new pieces we are working on as well as important functions the Board manages continually. We are vigilantly monitoring both Federal and State mandates that impact the built environment. One significant upcoming change will be the transition and enforcement of the 2009 International Energy Code with full implementation by January 2012. As published in the June 4 Texas Register, the Texas State Energy Conservation Office (SECO) has officially adopted a rule (proposed March 26) to update the State's energy codes codified in 34 TAC §19.53. The rule will update the Texas Building Energy Performance Standards (currently based on the 2000 IECC with the 2001 Supplement) to:

- For single family homes – the energy efficiency provisions (Chapter 11) of the 2009 International Residential Code (IRC), effective January 1, 2012.
- For all other residential, commercial, and industrial buildings – the 2009 IECC, effective April 1, 2011

BOAT will provide greater details in an upcoming edition of our newsletter.

These changes, and the changes that have impacted the global economy, provide challenges to the communities, our membership association, as well as to stakeholders involved in building safety and sustainability. In the upcoming year, organizationally; we need to be more vigilant, provide more information and training to ensure the continued success for all of us. This organization is your organization; we need to provide the tools and resources needed to accomplish the mission. The ultimate mission, our mission, to provide for safety in the built environment; code enforcement, construction codes and providing for sustainability. WE are the authority in the State of Texas; WE are Texas Strong, keep up the great work you do every day.

I am very proud to be a small portion of this vast membership. I am determined to do all that I can, for all I can, towards OUR continued success to be the best.

Do your part, stay involved, participate when you can, and above all: have fun doing it.

Scott A. McDonald, CBO
President

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SAFETY TIPS: THINK COOL AND GET READY FOR COOLER DAYS AHEAD! FIREPLACES!!!!!! HOT TOPICS!!!!!!

These safety tips will help to protect you and your family in and around your house.



Protect against sparks by enclosing a fireplace's opening with glass doors or a sturdy screen. Never close the flue while a fire is still smoldering. Carbon monoxide can build up.

Fireplaces are consistently rated as one of the top amenities desired by home-owners. In fact, fireplaces have one of the highest investment returns of any addition to your home. Here are a few tips to keep safe when using your beautiful fireplace: When you light the fire, keep the flue fully open for maximum airflow to feed the flames. Once the fire is roaring, close the flue to the point where the chimney starts smoking, and then open it just a tad for optimal heat. To keep airflow constant and avoid carbon monoxide buildup, open the window closest to the fire by a half-inch. And make sure to keep a fire extinguisher handy, because even a "dead" fire can suddenly emit random, carpet-igniting sparks.

Make sure that any fabrics you use for upholstery and curtains are flame retardant. All new sofas have to meet strict fire regulations, but second-hand ones may have been made before they came into force.

Here's a fire safety tip: Don't ever leave the dryer running when you are not at home. In 1998, there were 14,300 home fires related to dryers. Never run an empty microwave; it can cause overheating and serious damage.

Change your furnace filter monthly. A clogged filter can cause the unit to overheat and can lead to premature damage to the air conditioning system.

Paint is flammable; store it in a climate-controlled area away from heat sources. Cans exposed to heat can expand, causing leakage.

Lights with motion detectors are convenient and an efficient source for outdoor security lighting. Well positioned motion detectors make it virtually impossible for anyone to sneak up on your home.

To reduce the likelihood of burglary, do everything you can to make your home appear occupied when you are away: leave lights and a radio on timers, have the lawn mowed, and have newspapers and mail collected.

Never use a metal ladder around power lines or electrical wiring; a metal ladder will pose the risk of electric shock.

The single most important fire preventive measure is to equip your home with working smoke detectors. Place one on the entry level and outside each sleeping area. Remember to test them every month and replace the batteries annually.

Freestanding metal fireplaces or pottery chimineas are fun and enjoyable for small outdoor fires; just make sure not to put them on wooden decks or other flammable surfaces.

More than one-eighth of annual house fires are caused by space-heating equipment. Electric or liquid fuel heaters must be at least three feet away from any object, including walls.

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SAFETY TIPS: THINK COOL AND GET READY FOR COOLER DAYS AHEAD! FIREPLACES!!!!!! HOT TOPICS!!!!!

(continued)

A few simple precautions can go a long way toward protecting your home from termites. Fixing all leaks, cleaning overflowing gutters, and using splash blocks to divert water from the foundation will keep your house dry and uninviting for the pests. Isolating wood from concrete or masonry, trimming shrubbery, and keeping wood mulch away from your house will also keep termites at bay. Also, make sure all firewood is stored off the ground at least 15 feet from the house and there are no tree stumps or scrap wood in close vicinity.

To prevent scalding, make sure your water heater temperature is set no higher than 120 degrees Fahrenheit.

Keeping a phone list in the kitchen near the phone is not just convenient, but is a safety feature as well. Jot down phone numbers for the police, fire department, doctors, family members, or neighbors, so you can act quickly if necessary. If you use well water, be aware of agricultural activity in your area, which affects the quality of your water. After your first year on the property, test the water as you feel necessary.

Change the batteries in your smoke and carbon monoxide detectors at the beginning and ending of Daylight Savings Time. They're lifesavers, and they should always be treated that way.

Arrange to have the chimney or flue cleaned. Blocked residue or even a bird's nest can disrupt ventilation and endanger your health or family.

Kurt Kasson, CBO, City of Euless

WHERE ARE THE VOLUNTEERS?

The City of West University Place
A Neighborhood City



Merriam-Webster Dictionary

Definition: 3volunteer

Function: verb

Date: circa 1755

intransitive verb : to offer oneself as a volunteer <**volunteered** to host the meeting>

transitive verb : to offer or bestow **voluntarily** <**volunteer** one's services>

"Volunteer," contrary to popular belief, is not a four-letter word. It is an action word—verb, if you will. We are all called to be men and women of action, so why don't we volunteer as much as we should?

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WHERE ARE THE VOLUNTEERS?

(Continued)

- I am married with children, and it will take too much time away from my family. True, this can happen; however, it is more likely to happen when only the minimum number of persons necessary to perform a task volunteer, because much will be needed from a few.
- I am too busy now; I can't take on anything new. In the world of today we are all busy—answering e-mails, voice-mails, text messages, face book, twitter, cell phones, and PDAs. However, there is an old saying that goes, “If you need something done, ask the busiest person you know, and this person will “get-r-done.” (I added the get-r-done part.)
- I don't want to get involved, because who knows where that will lead? It most likely will lead to you doing a task that needs doing but no one else wants to do. That's okay; someone did it before you, and with your leadership, someone will take it over from you when you're done.
- I don't want to get involved; I just want to be a part of the group. If you don't get involved, pretty soon there won't be a group. I have personally stood in front of a group of 35 to 40 persons and asked for three volunteers to be a nominating committee or fact-finding committee and had no one raise a hand. I have gone so far as to sit down in a chair stating, “I will wait, because we as an organization need this,” only to have no one raise a hand. Sad, but true.

In short—volunteer, if you don't, who will? Why don't you be the one who helps, gets involved, generates interest, gets others involved, and does the job no one else would do? Maybe you will get an “Atta-A-Boy” or “Atta-A-Girl,” or maybe not—but you will know what you did for the group. It sure makes your mirror provide a better reflection of the hopes for a future—all because you said, “Yes, I will.”

John R. Brown, MCP, CFM, Chief Building Official, City of West University Place

FORGIVENESS OR PERMISSION

I know everyone is familiar with the phrase, “It's easier to ask for forgiveness than to ask for permission.” Is it just me or Waco, but has this started to become the rule instead of the exception? I'm not sure if it's the economy/recession or if citizens, builders, contractors, and/or developers just don't want to follow the rules as they have been laid out. In times past, this would occur infrequently, but now it seems it's occurring weekly (if not several times a week). I'm not just talking about sheds, carports, other accessory buildings, etc., built without a permit or built in a setback or easement; I'm also talking about large residential and commercial projects.

One of the biggest problems we are facing is slabs not being grounded in accordance with the 2008 NEC, especially residential. We have heard the following: “I didn't know I needed an inspection”; the electrician says, “I told the concrete guy not to pour because I haven't received an inspection”; and the one I like the most: The concrete guy tells the electrician he is pouring right now, no matter what (“I don't care if you haven't received your inspection.”). It hasn't always been like this, has it?

So I guess one of the big questions is—what enforcement action do you take? Here are some examples: issuing a ticket, filing a complaint, or both, and the one I like the least is final the project and denote in the permanent record there was

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FORGIVENESS OR PERMISSION

(Continued)

not an inspection conducted on A, B, C, etc. The last one is a real disservice to the citizen/property owner. This must be documented, because many citizens will do open records request to see if the structure was inspected, and if not, why. Now if we made destructive inspections, the last option would not be used. We could have the builder/contractor bust up the slab to show us the grounding system; remove sheetrock to show insulation, plumbing, mechanical, and electrical (we require them to do some of this, but not much); etc. The problem is, that is not how the system is supposed to work. If you want to live in the country and do whatever you can get away with, then that is where you should probably live and do business.

When you live in a city, there inherently comes with that the privilege and expectation that you will and should follow the rules, laws, codes, and ordinances that are in place. Can you see a city removing all traffic control devices and hoping and praying all the citizens don't kill themselves? That would most certainly lead to disaster. The codes and ordinances we enforce daily can have the same effect if inspections are not conducted and documented.

In closing, it seems to be a phenomenon that is gaining ground, even though the ground is shaky and undesirable.

Randall R. Childers, CBO, BOAT TML Representative

THIS IS YOUR GLASS, OR YOUR LIFE—HOW DO YOU VIEW THIS?



Charles Swindoll said, "I am convinced that life is 10 percent what happens to me, and 90 percent how I react to it."

I saw a demonstration on up-lifting or pulling down that impressed me so much at the time, I remember it like it was yesterday. The speaker asked a young lady to assist him with a demonstration, and of course she agreed. He asked her to stand in a chair, on stage. When she became stabilized atop the chair, he asked her to hold his hand and to lift him up into the chair beside her. She smiled, of course, probably thinking to herself that she couldn't lift him in the chair with a pulley system, but she agreed to try. You're right! She had no luck. She didn't even get his heels off the stage. Then the speaker asked her to brace herself while he attempted to pull her down from her elevated position atop the chair. You could see she braced herself, leaning back slightly, then the speaker, while still holding her hand, gave her a gentle tug, and down she came. The speaker thanked her and led her back to her seat. When he returned to the stage, he asked, "Did you see all the things that happened up here? The first thing was **Trust**. She trusted me not to embarrass her or allow her to fall. Don't let your life's negative moments keep you from trusting. The second thing was her reaction to being pulled off the chair—she just hopped down. She didn't fall, she didn't get mad, she didn't cry, she didn't say, "I didn't know you were going to pull that hard"—she just hopped down. The point the speaker was making in this demonstration was how **very hard** it is to lift people up—"Glass Half Full"—but how **very easy** it is to pull them down—"Glass Half Empty." By her reactions, I also took away the idea that you should try to accomplish the task, even if you have mixed feelings about it. And if it proves to be an impossible task, do not regret trying to complete what you set out to do—"Glass Half Full."

You cannot control what others do to you or say about you; however, you can control how you feel about it and react to it. You arrive at your office, and the first thing out of the box, some contractor or citizen calls or comes in raising cane about

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THIS IS YOUR GLASS, OR YOUR LIFE—HOW DO YOU VIEW THIS?

(Continued)

what you did or didn't do. When they leave, how will the rest of your day go? It is **YOUR CHOICE** how you "deal with the situation." What you will find is that your reaction will influence how those around you will react to similar situations or even deal with the balance of the day.

I had a situation several years ago where I could hear a man, shall we say, complaining loudly at the permit clerk. I went in to divert his attention away from her to me. (By the way, have you ever noticed how people complain louder to a woman behind the counter than they do to a man? Go figure, it must be the "*Father Syndrome*." Anyway, I regress at times.) When I arrived at the counter, I interrupted him and asked if I could assist him. At that point, he directed his wrath toward me. After listening to his complaint, I explained to him that we could not assist him with his situation and he needed to speak with the public works department, which could resolve his problem. And he didn't even slow down. How did I react? Well, I just backed away from the counter a step or two, folded my arms, and stood there looking at him. After a few seconds, he looked at me and stated, "I know it isn't your fault, but I am upset." I replied that I understood he was upset and I would allow him to go ahead and get it out of his system. As you can imagine, he stopped very shortly after that. He finished not by apologizing, but by thanking me for listening to him. I could not control what he was saying, but I could control how I reacted to it. If a situation arises, be prepared to deal with negative "**Glass Half Empty**" people with a Positive "**FULL-GLASS**" attitude! You can raise them up, and maybe the people around you, as well.

John R. Brown, MCP, CFM, Chief Building Official, City of West University Place

DISASTER RISK MITIGATION AND THE BUILDING OFFICIAL



John Brown and I attended the Texas Risk Mitigation Leadership Forum in June. There were more than 14 different speakers, and the keynote address was presented by Lieutenant Governor David Dewhurst. It was a very interesting two days of speakers and roundtable discussions. I want to share some observations from my notes that I took during the conference that directly impact building officials. Please understand that very few of the speakers were code experts; as a matter of fact, there were only one or two who truly understood the code development process and the depth of construction codes. But none the less, there were some key points.

UN-AMENDED CODES: Several times statements were made regarding the enforcement of "un-amended codes" as a significant factor for the reduction in loss of life and loss of property (risk mitigation). My first blush at this was "No way in Texas will you get un-amended codes." Then later they talked about "code-plus" things that were cost effective options to improve risk mitigation. One suggestion was to use higher wind speeds (especially in the coastal areas) that would equate to better load transfer designs and more structural connections to resist higher wind speeds. All this led me to believe that they were suggesting they wanted construction codes to be adopted and enforced, but that amending the code to be "less restrictive" to accommodate local building practices or reduce costs actually increases damages and costs following a disaster. Even in new construction, more homes are damaged—and the damage is more significant—if the homes do not meet the minimum standards spelled out in the code. This is something that we as building officials need to be sure that we communicate to our Building and Standards Commissions or to our city councils as they are pressured by builders to modify the code to make construction easier or cheaper. In the long run, amending the code to be less restrictive is a disservice to the people who live in our cities and is very costly.

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DISASTER RISK MITIGATION AND THE BUILDING OFFICIAL

(Continued)

Comprehensive Planning: There was an emphasis on every city having an up-to-date comprehensive plan and for the plan to include provisions in case of a disaster wiping out a portion of a city. I know that in my city we have a comprehensive plan, and the plan is considered with each zoning request that comes in—but it does not take into account the possibility of a neighborhood or business district being destroyed. What they were getting at was, if a plan is in place when a disaster strikes, everyone should know what can and should be built back. You take the opportunity to fix mismatches in the development of your city. An example would be where a neighborhood backs up to a heavy industrial lead smelter. These are not compatible uses and shouldn't be neighbors. If a plan were in place that reflected that in the event of a disaster, either the neighborhood should not be built back, or the smelter shouldn't be reconstructed, the building official would know how to proceed following the disaster. The building official would know what to allow to be reconstructed and what to deny, and with the plan in place, the building official doesn't have to make an arbitrary decision.



Property Maintenance: A statement was made that “disaster disproportionately singles out lower-income families and homes that need maintenance.” Now I don't agree that the disaster makes a decision to single out a group of people or specific homes, but I would agree that lower-income families and poorly maintained homes are more susceptible to damage in the event of a disaster. Lower-income families generally live in older buildings and have less discretionary funds to perform maintenance on the building. If a building is allowed to deteriorate, it is much more likely to be damaged by high to moderate winds, rain, hail, or other weather events, and the damage is likely to be more significant—leading to more families being forced out of their homes, because the home is no longer habitable. The cost of this domino effect is borne by all of our

residents, not just the ones impacted by the disaster; everyone pays for it with increased insurance rates and/or in federal or state disaster relief. I believe that property maintenance is the final step in the development process. Without active property maintenance, we are not protecting what we worked so hard to gain. I am saying this as a building official for my city as well as a husband and father to protect my family. As building officials, we should actively promote proactive property maintenance as the follow-up to our work of making sure construction meets minimum code requirements. If someone is not maintaining a building to meet those minimum requirements, we cannot expect the building to withstand what Mother Nature may throw at it.

There were a few notable websites they recommended to visit: www.greathurricaneblowout.org, www.flash.org, and www.twia.org.

All in all, the building official arguably has one of the most important jobs following a disaster, but just as important, the building official can have a significant impact prior to a disaster. You are the “Silent Hero.”

Jim Olk, Building Official, City of Farmers Branch



THE INTERNATIONAL GREEN CONSTRUCTION CODE (IGCC) DEVELOPMENT PROCESS (PART ONE)

Board Action. In March 2009, the ICC Board of Directors approved a motion stating its “Intent to Initiate a Code Development Project” regarding a green code for commercial and high-performance buildings. Discussion included concerns that local and state jurisdictions are experimenting with “substitute codes” utilizing systems and standards not intended to be regulatory in nature and not being implemented in a uniform fashion across jurisdictional boundaries. As a result, an increasing desire for a regulatory framework specific to green commercial construction has been articulated by both governmental and non-governmental sources.



Staff Review. The Board’s motion led to staff exploration of possible options and solicitation of feedback from stakeholders as a basis for further Board discussion and action. To obtain feedback and critical information, staff undertook three activities:

- Brought together a group of leading green experts in a focus group format
- Issued a public announcement
- Conducted discussions with key organizations

Focus Group. In April 2009, staff convened a focus group of leading industry experts in green building and conducted a facilitated discussion. The focus group was told that this new project was to develop a green code for commercial buildings that is consistent and coordinated with the ICC family of Codes and Standards. Participants also were told that the code should provide a new regulatory framework built with leading recognized rating systems in mind, and that it should provide criteria to drive green building into everyday practice.

The specific objective was described as the Development of an ICC Green Building Code, which:

- Is consistent with ICC’s mission
- Is developed and maintained within the ICC code process
- Is coordinated with the family of I-Codes
- Is adoptable on a mandatory basis
- Effectively achieves green and sustainable goals
- Provides a minimum level of sustainability that is truly sustainable

The focus group addressed the following discussion points:

- What forces are driving jurisdictions to implement green building programs, and what environmental goals do they really hope to achieve? (2030 Challenge, GHG emissions reduction, Recovery Act, etc.)
- Do jurisdictions sometimes have target metrics that must be achieved and, if so, what are they?
- What specific target metrics must an ICC Green Code incorporate to ensure that it can be used to help jurisdictions meet their goals?
- How can a green building code with minimum requirements be structured to meet these goals?

The focus group’s conclusions included:

- Communities are looking for a “model” Green Building Code that they can use to meet mandates.
- The IGBC should be a separate document; do not build in to the other I-codes. A separate document facilitates



THE INTERNATIONAL GREEN CONSTRUCTION CODE (IGCC) DEVELOPMENT PROCESS (PART ONE)

(Continued)

maintenance and updating. Green issues interspersed among the codes may adversely impact adoption.

- Code should set a baseline of green requirements that build upon the ICC Family of Codes; further options beyond the baseline should also be included.
- Code should be written in mandatory language that provides a new regulatory framework.
- Rating systems created the green movement/momentum, and the ICC is taking it to the next logical step—standardized and enforceable model regulations; thus, the code should enhance, not replace, rating systems.
- Code should be designed with performance options in addition to prescriptive provisions.
- Code needs to be flexible; promote innovation.
- Focus areas: energy conservation; water conservation; materials/resource conservation; indoor environmental quality (noise, air quality, etc.); site sustainability and location (i.e., location to mass transit); environmental impact on building as a whole.

Public Comment. Public comment also was solicited during this period. Support was voiced from the manufacturing sector regarding the need for a “balanced approach,” and interest was expressed from the architect community regarding integration with standards such as LEED and Energy Star.

Board Vote. Based on the above information as reported by staff to the Board, the Board voted at its May meeting to move forward with the development of the new Code.

Scope

- The scope of the IGCC is based largely on the feedback from the focus group and other sources as listed above:
- The Code should be developed to apply to commercial buildings in a manner that is consistent and coordinated with the ICC Family of Codes and Standards.
- The Code should be applicable to the construction of buildings, structures, and systems, including alterations and additions.
- The Code should set a baseline of green requirements that build upon the ICC Family of Codes; further options beyond the baseline should also be included.
- Residential portions of buildings, except institutional, should be covered by the National Green Building Standard, developed by the National Association of Homebuilders and the ICC, also known as ICC 700-2008.
- The Code should provide a new regulatory framework built with leading recognized rating systems in mind and provide criteria to drive green building into everyday practice.
- The Code should address energy use efficiency; water use efficiency; materials and resource use; indoor environment quality; the building’s impact on environment; site design; sustainable building owner/facility management education; and existing buildings.

Relationship to Other Codes

- The IGCC will work in coordination with all other I-Codes.
- Specific construction approaches for commercial buildings relating to “green” design and performance extend beyond the scope of existing I-Codes, necessitating a separate code.

Ravi Shah, ICC Board of Directors

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ARE YOU TAKING YOUR PERMIT CLERKS FOR A RIDE?



In our building department, we have a tradition when one of our permit clerks is leaving employment with us or retires—we try to set up a ride with the inspector. Before the start of summer, we had a permit clerk who had been with us for three years until she had to leave to finish her last semester of school to become a teacher. So during her last two weeks with us, we set aside her last Friday (dress-down blue jean day) to go out all morning with the inspector of her choice.

When she got back, she was telling everyone how much she thoroughly enjoyed it. She came back as a new person, someone who “got it.” During the past three years, she and another clerk retrieved and entered an average of 100-120 inspections per day, five days a week, all year long. And for the first time, the inspections became visual and meant more than just an entry code. They say a picture is worth a thousand words; well, you can say the same for “seeing the inspection.”

The building inspector reports that the clerk said she thought all the inspector did was “drive up, tag it, and go.” Not true. During one of the Soils inspections (water/sewer in-ground rough-in) that she helped perform, she had to walk the entire building pad of a new house following the entire water and sewer piping system. She asked, “Why is the white pipe sticking up out of the ground so high?” and the inspector explained how the 10-foot head (of water) test was used as one of the methods to ensure the drainage piping system had no leaks. In addition, he told her that some plumbers will use an air test because water may not be available on site. Another inspection was for a backflow preventer installed for a lawn irrigation system. She learned where and how they had to be installed and a basic understanding of the purpose and operation of the device. Later that morning, one of the inspections was turned down during a framing inspection. The inspector filled out the red tag and gave it to her to post it on the front window. She said, “You know, it kind of felt good ‘slapping’ the red tag on” because the builder did not do it right. The inspector also was able to take the time to use the field trip to explain the importance of obtaining accurate notes for any special or phased inspections. If the notes are not captured during the inspection request, the inspector can lose valuable time trying to identify special needs in the field. The visual ride does improve communication between the clerical and field staff.

As we go forward, our plans are to send newly hired clerks on their first field trip at their third-month anniversary, and send all clerks out once every quarter. Besides improving their knowledge of the field inspection process, it gets them out of the office to see significant projects under construction. Whether it is a new house, an addition to the local hospital, a new school being built, or the latest restaurant getting ready to open up, each project can offer its own differences to see. The photos attached are of one of the clerks who have been with us for some time, and this was her first ride with an inspector. She reported that it was the best day at work she has ever had, and despite the heat of these summer days, she was not ready to come back to the office.

In closing, after both clerks came back from their field trips, they both said two things—“You should have been doing this a long time ago,” and “When are the inspectors going to sit at the permit counter to learn what we do?”

Earl Abbott, Building Official, City of Killeen



Sonja Milton, Permit Clerk and Harold Clipper, Inspector

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LIGHTEN UP

With the stress that we are under every day trying to balance home life with work, balanced budgets with service levels, and aggravated contractors with customer service, we as leaders can benefit from remembering that almost nothing is more helpful in dealing with people than a sense of humor. Now a sense of humor doesn't mean a knack for telling jokes. Rather, it means the ability to take some setbacks and still see that the world has not come to an end.



If you can keep from taking a situation or yourself too seriously, you will get much better results. If you don't take yourself too seriously, there are always things in any situation that are still amusing, that you can still smile about. And a smiling, cheerful leader invariably wins more cooperation than a grim or gloomy one.

If all you do in a crisis is add to the heat and confusion, people will soon lose respect for your abilities under pressure. But if you can maintain your sense of proportion and humor when the world seems to be falling apart, people who rely on you will show their appreciation in better work and greater loyalty.

Yes, some problems are serious, but there's nothing to be gained by exaggerating their importance. Get in the habit of taking yourself and your problems less seriously. Learn to smile at yourself and the world as well.

Chris Haver, CBO, Building Official, City of College Station

NEW MEMBERS CORNER!

Look for member profiles in our next edition from:

Delwin Derrick
Chief Building Official
City of Plainview – population 23,000

George Dixon
Certified Building Official
City of Baytown – population 70,330

John Speights
Building Official
City of Port Aransas – population 3, 842

Howard Harbin
Plans Examiner
City of Allen – population 84,200

Profiles will be forthcomingstay tuned!



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ENERGY STAR FOR HOMES—AN EVER-IMPROVING PROCESS

What we know of ENERGY STAR¹ is that it is a more energy efficient product than the industry standard, which holds true for homes as well. What most people do not know is that an ENERGY STAR home provides more than energy efficiency to the consumer. Homes built to the ENERGY STAR standards are also more comfortable and durable. This is due to the design and quality in which the home is to be built. An ENERGY STAR home must be properly designed before it is built, and then verified by an approved Home Energy Rating System Rater (HERS Rater)². Features inspected to ensure compliance are HVAC Equipment, water heater, insulation, and windows. Along with the verification of these products, the quality in which they are installed is also verified. Quality, efficiency, and durability are the key elements to an ENERGY STAR home.



In 2011, the U.S. Environmental Protection Agency's (EPA) ENERGY STAR Guidelines³ (to be named "Version 3.0") will improve the standards that will allow an "ENERGY STAR" home to be labeled. These standards go further to increase durability and indoor air quality, while increasing the current program's energy efficiency and durability.

Energy efficiency will continue to be the key component of an ENERGY STAR home, reducing our demand and dependence on foreign resources, while helping to save consumers on their utility bills. ENERGY STAR homes are designed to retain the conditioned environment, preventing unnecessary heat gain/loss through the Building Envelope (exterior walls, ceiling, foundation, etc.). Improved insulation, window efficiencies, properly designed heating/cooling equipment, and water heating systems are all taken into account for each home designed.

In Version 3.0, the builder and HVAC contractor have more responsibility in documenting and tracking how they build and install products, though the HERS rater still verifies that they complete their tasks appropriately and accordingly. The EPA designed these new inspection checklists for implementation starting January 1, 2011. These checklists will not yet be a pass/fail, which will allow a grace period to help each builder learn new methods of compliance. These checklists will go into "full force," and all items will need to be approved/passed, starting January 1, 2012.

The checklists are as follows:

- Thermal Enclosure Inspection Checklist
 - Formerly Thermal Bypass inspection checklist (These features will still be required to pass during the 2011 grace period.)
 - Added measures to reduce Thermal Bridging in the Framing Techniques
- HVAC Quality Installation Inspection Checklist
 - Two separate checklists exist for HVAC
 - Contractor Checklist
 - Design
 - Balancing
 - Testing
 - HERS Rater Checklist
- Water Management Inspection Checklist
 - Builder is responsible for implementing and verifying items on the Water Management Checklist

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ENERGY STAR FOR HOMES—AN EVER-IMPROVING PROCESS

(Continued)

Along with the checklists, ENERGY STAR Version 3.0 will require the energy modeling to be compared to their Reference Designed home (Prescriptive Home) and allow trade-offs of key energy features, as long as it meets (or improves upon) the Reference Design's energy usage. The Reference Design encompasses a Size Adjustment Factor; minimum HVAC and water heating equipment efficiencies; minimum wall assembly and window values; the inspection checklists mentioned above; and diagnostic testing (house infiltration and duct system leakage). A HERS rater will be required to perform the energy modeling, inspections, and performance testing and to gather appropriate checklists.

The performance tests required are the same that fall under the 2009 IECC⁴ Duct System and House Leakage requirements found in Chapter 4 Sections 402.4.2 (Air Sealing and Insulation for Building) and 403.2.2 (Duct Sealing). Table 402.4.2 elements are reflected in the Thermal Enclosure Checklist referenced above. ENERGY STAR for homes incorporates base code strategies and expands upon them to help ensure quality built homes. For instance, the 2009 IECC allows for the duct system to have a leakage rate of up to 8 CFM per 100 square feet of conditioned floor area, and ENERGY STAR's allowable range is less than 4 CFM per 100 square feet of conditioned floor area.

Two separate analyses will exist per home (until the software is designed to have the Reference Design in the background—process still pending); the first will be to model the home to be built utilizing the Reference Design measures to obtain a HERS Index Score; next will be to run an analysis using trade-off measures to make sure the home is still in compliance. For example, a home builder is using windows that are far more efficient than the Reference Design, and he would like to install a 13 SEER A/C System instead of the 14 SEER that is called for in the Reference Design. The home will qualify as long as the HERS Index matches with the changes (windows improving and decreasing the SEER).

The reasoning behind the increased standards of the ENERGY STAR program is that the Energy Code is always increasing. There needs to be a true differentiation of a home that is built to the Energy Code versus a home that is built above and beyond that of the standard. This is the branding methodology that the EPA has pursued in all ENERGY STAR products, from electronics to household appliances. They have also set standards for other products, such as air conditioning systems, window efficiencies, and efficiency ratings on exterior doors. ENERGY STAR is a nationally recognized symbol that is now a factor for a potential homebuyer in making the decision of a home purchase.

Cody McGhie is the energy services manager for Bureau Veritas and manages the IECC Compliance Program, Energy Star/Green Building Program, and LEED for Homes Program. He holds numerous certifications in the Energy/Green industry—LEED Quality Assurance Designee, RESNET HERS Rater, RESNET Quality Assurance Designee, CalCerts Rater, CHEERS Rater, PTCS Heat Pump Commissioning Certified, PTCS Duct Testing Certified, and Environments for Living Certified. For questions, e-mail Cody at cody.mcghie@us.bureauveritas.com.

Van Tran, Vice President, Bureau Veritas

¹ U.S. Environmental Protection Agencies Energy Efficiency program "ENERGY STAR", <http://www.energystar.gov/>

² A Home Energy Rating System Rater, Residential Services Network designation, <http://www.resnet.us/professional>

³ ENERGY STAR Program Guidelines http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_2011_comments (2010)

⁴ International Code Council, International Energy Conservation Code 2009 Edition (Illinois: International Code Council, 2009)

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ME, MYSELF, AND I

One of the reasons I joined BOAT and eventually became a Board member was the advantage of participating in a statewide chapter dealing with building codes and the ability to interact with code administrators across our vast territory. As the title of my article says, it's me, myself, and I. What makes me different from some of my fellow BOAT chapter members is that I'm a small city. I don't have the luxury of having a separate planning department, zoning department, fire department, etc. It's just me.

I'm a small city, as I like to say; Waco is north of us about five miles. I recently had a pre-construction meeting with a construction group out of the D/FW area, and it was like the big boys came to town. They were astonished that we didn't have all the separate departments that they were used to dealing with. Once again, it was me, myself, and I. I can't begin to tell you how many times I had to change hats during this meeting, as we went from parking to setback requirements to fencing to storm water run-off to zoning to water and sewer taps, fire suppression, parking regulations, and ADA requirements. If you're from a smaller city, you know what I'm talking about. Not only do we have to enforce the codes adopted by our respective cities, we also have to enforce state regulations and federal regulations.



My point is that this is one of the advantages of being a member of BOAT—an individual can go to our Web site, get contact information, and correspond with other code administrators about how they would address the specific situations. In my opinion, there is nothing better than being able to interact with fellow code officials to address an area of concern. That's what makes our organization great—the ability to interact with each other. We are only as strong as our weakest link. Don't become the weakest link.

We are here to make sure a sustainable, safe community is constructed and maintained. Our respective titles are not "God almighty inspectors!" We are code administrators—nothing more and for sure, nothing less. I am a big believer in old proverbs, quotes, and words of wisdom; one that applies here is, "If you build it, they will come."

Bruce Braley, Community Development Director, City of Hewitt

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MOBILE TRAINING

You have to crawl before you walk. Then walk before your run. We are still in the crawling stage, but more importantly we are underway with the implementation of our mobile training series.

Hewitt, Texas was the site of our first attempt at this new idea. Bruce Braley and his staff hosted over 40 students as we presented classes on Braud Wall Lines, and significant change to the IRC and IBC. The Bluebonnet Chapter and the Lone Star Chapter did most of the organizing and provided the lunch. While their profit was only a few hundred dollars, they educated many of their people at virtually no cost.

Amarillo hosted a similar class in June. This was a one day class with over 60 in attendance. Special thanks to Chris Haver and Van Tran for helping facilitate these classes on behalf of BOAT.

Next up is Corpus Christi in October. We anticipate another success. Steve Draper, Corpus Christi Building Official will be our host. He is new to Texas so let's go the extra mile to help him make this a great success for the Corpus Christi area as well as for BOAT.

BOAT has an opportunity to help sponsor a Texas Accessibility Academy taught by TDLR thus offering CEU's for Architects, Registered Accessibility Specialists, etc.

Here is what we are looking at:

- BOAT would partner with the TDLR, Accessibility Program
- BOAT would partner with our local Chapters
- BOAT would pay the TDLR travel expenses
- BOAT would pay for the Texas Accessibility academy binders
- Local Chapter would provide space and lunch

We would charge the same TDLR fee of \$150.00 fee for the 3-day academy or perhaps \$100.00 for a 2-day academy. It would be more beneficial to our code officials with a condensed 2-day program rather than a 3-day program. TDLR would spend less time on the legal/legislative aspects of the academy. We could also reduce the registration cost to our members if we commit to greater numbers of attendees.

We are looking at the following dates:

- Monday, September 13th and Tuesday, September 14th
- Monday, September 20th and Tuesday, September 21st
- Monday, September 27th and Tuesday, September 28th
- Monday, October 4th and Tuesday, October 5th





MEDICAL GAS AND VACUUM PIPING INSTALLATIONS IN TEXAS



Medical Gas Sparks Interest...

As the old saying goes, "Everything is bigger and better in Texas." As our state grows in population, so does the demand for high quality medical facilities. In order to meet this demand, counties throughout Texas are building new and updated hospitals, sometimes referred to as "replacement hospitals."

Patients depend on various hospital plumbing systems to aid in their recovery. Medical gas systems include a vast array of piping and technological machinery that go beyond medical gasses alone. In some cases, smaller jurisdictions may not have a full-time plumbing inspector and may not have the budget to hire a third-party inspector. This can result in improper installation, thereby putting the patients at risk. The plans for any medical gas system should be reviewed, permitted, and inspected.

A common misconception in smaller jurisdictions is that building officials and inspectors are dependent on the systems verifier to make the final inspection and issue a certification to the city. In truth, the law states that verification is required by the state (plumbing inspector) before the city can issue a certificate of occupancy.

System verifiers and plumbing inspectors have two very different responsibilities. Systems verifiers are qualified under the American Society of Sanitary Engineers and base their inspections on NFPA 99-C and ANSI/ASSE professional qualification standards. Their responsibilities include piping purity testing, cross connections, final blow downs, valve testing, verifying the operations of manifold systems, air compressors and vacuum pumps, etc.

The plumbing inspector is responsible for plumbing permits, qualifications of welders, shop drawings, manufacture literature, copper tubing and fittings, purging, labeling and identification, initial cross connection testing, standing pressure testing, and vacuum testing. To an inspector who hasn't had much experience with this type of work, it can be intimidating.

A medical gas contractor must have the master med-gas endorsement and all brazers must acquire at least the journeyman endorsement. The medical gas endorsement is only available to the master and journeyman plumber. The inspector cannot carry this endorsement on his or her license. Consequently we have inspectors who do not carry a plumbing license and by knowing they cannot get the endorsement they simply piggy back of the systems verifier's report.

Industry professionals, I urge each of you—whether you're a building official, plans examiner, or plumbing inspector—to go through the medical gas endorsement training, because it is based on the NFPA-99C and Texas Plumbing Licensing law. Although you won't hold the endorsement, you will receive the same training that the master and journeyman get. Mistakes made in the installation and maintenance of medical gas and vacuum installations can result in germinate damage or even death to our patients. Take a stand for continuing education. Realize your potential and better yourself as an inspector.

The Plumbing-Heating-Cooling-Contractors Association of Texas is one of many providers that offer endorsement training classes all over the state. Job longevity is critical. Take every step to ensure your extended worth!

Bill White, PHCC-TX Instructor
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MARK YOUR CALENDAR

September 13-14, 2010

BOAT/TDLR Accessibility Academy (check the BOAT Web site for location)

September 20-21, 2010

BOAT/TDLR Accessibility Academy (check the BOAT Web site for location)

September 27-28, 2010

BOAT/TDLR Accessibility Academy, Amarillo

October 4-5, 2010

BOAT/TDLR Accessibility Academy (check the BOAT Web site for location)

October 25-28, 2010

ICC Annual Conference, Charlotte, North Carolina

October 26-29, 2010

TML Annual Conference and Exhibition, Corpus Christi

October 28-November 1, 2010

2010 Final Action Hearings, Charlotte, North Carolina

February 22-25, 2011

BOAT Mid-Year Meeting, Round Rock



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