

This Monthly Newsletter is produced and distributed free of charge. The Center for Campus Fire Safety® logo and text, Fire Smart Campus, Campus Fire Safety e-NEWZONE, Everyone Graduates & Campus Fire Safety Month Network are trademarks of The Center for Campus Fire Safety (The Center)



Campus Fire Safety e-NewZone Monthly Newsletter ... February 2015, Volume 4, Issue 2

([Download and Print Pages](#))

[HOME](#) | [ABOUT](#) | [MEMBERSHIP](#) | [RESOURCES](#) | [TRAINING & ACTIVITIES](#) | [TESTIMONIALS](#) | [CONTACT US](#)



Student team to spread Fire Safety Message

We all know the importance of fire prevention; it is something that fire safety educators and fire officials think about daily. But what about today's youth? Are we reaching them? With that question in mind, The Center for Campus Fire Safety is pleased to announce "Campus Fire Safety for Students," a collaborative campaign that actively works to raise fire and life safety awareness among college students nationwide. The initiative is being spearheaded by the University of New Haven's Fire Science Club, with active support from The Center and the National Fire Protection Association (NFPA).... [MORE](#)



Left to Right:

Cathy Tabor, Michael J. Swain (The Center),

Kyle Mellon, Michael Wailgum, Greg Fasold, Nick Demko, Scott Wiercinski, Tarren Horvath (Fire Science Club),

Lorraine Carli (NFPA) and

Paul D. Martin (The Center)

FROM THE VICE PRESIDENT



As I sit here filling in for the Vacationing President(a well deserved vacation) I find myself admiring the current weather. For a few hours today Spring is visiting. The sun is out, the temperature is above freezing and there are no storms in the forecast. Having said that, we received 4 more inches of snow last night and the temperature will once again drop below zero tonight and early tomorrow morning.

The Center has been extremely busy despite the frigid cold and record snows that have occurred and seem to be sticking around. There have been sponsors continuing to sponsor the Center and the important work it does. I would like to personally add my thanks to the Sponsors who contribute to the Center and the important work the Center is doing... [MORE](#)



OFF-CAMPUS, by Tim Knisely

WINTER TIPS ... Winter has been and continues to be relentless this year in many parts of the country. Some cities have placed a bounty on PA's famous groundhog Punxsutawney Phil. His prediction of six more weeks of winter didn't warn of the looming cold and snow measured by the foot, rather than by the inch. If you're in the property management business you have likely had one or more weather related emergencies at your properties. In the student housing market the heat management of these properties can be more challenging since the tenants often times leave for long periods of time, or choose to not operate the heat at higher temperatures in order to save money. Unfortunately, not staying on top of these properties can have expensive consequences.... [MORE](#)



THE INSPECTOR, by Phil Chandler

OMG! Talk about perfect storms! No, not the kind our friends in Boston have encountered, rather those colossal fires, one or two in a generation, that make everyone with an interest in fire safety take notice. The AvalonBay apartment fire of last month in Edgewater New Jersey is a perfect example. As for the campus fire safety community, I dare say that its impact may be as far reaching as the Seton Hall ... [MORE](#)

Call for Speakers!

WE'RE LOOKING FOR 2015 WEBINAR SPEAKERS!

If you are interested in a webinar, simply let us know.... [Please click and complete your info.](#)

If you have questions, please contact SupportTeam@campusfiresafety.org



TRAINING OPPORTUNITIES



Chubb Training - The 2015 schedule is now online...

Chubb Offers **30% discount** to Members of The Center for Campus Fire Safety or **50%** if you are also a Building and Fire Code official or firefighter... [MORE](#)



Fire Smart Campus Training Opportunities ... The Center instructor(s) will come to your campus or town. Price varies depending upon location... [MORE](#)



Crowd Manager Training ... 2 hour online course @ \$19.95. Presented by ICC, NAFSM & CCFS, this course provides valid, credible training to those charged with crowd management at facilities including higher education. This meshes with The Center's mission of providing resources to our community. [MORE](#)

CENTER ACTIVITIES AND SOCIAL NETWORKS

Connect with us ... Join our social networks and discussions on fire and life safety.



[in](#) LinkedIn | [f](#) FaceBook | [t](#) Twitter

The Center's Social Network

Campus Fire Safety

Network with hundreds of Fire and Life Safety educators and Fire Officials across the world.



[Facebook](#) | [Twitter](#)

Student to Student Network

Please spread the word to your students and parents. This team will be speaking to other students through social media about the importance of Fire and Life Safety on and off-campus. In the future we will announce additional social networks, contests, materials and additional resources for students.



Off-Campus Fire & Life Safety Alliance [Login](#) | [Join](#)

We provide continual discussions about off-campus fire and life safety and we publish a monthly article on this topic that you can download free from our library.



CenterNet (a member directory & social networking opportunity for Center members only) [Login](#) | [Become a Member](#)



CODES, STANDARDS & MORE



What is the difference between the NFPA 704 “diamond” and OSHA GHS labels?

By Nancy Pearce, Certified Industrial Hygienist and Senior Fire Protection Engineer, NFPA

You probably have seen the NFPA label or placard on buildings, 55 gallon drums, tanks, storage rooms or even on the door to your chemistry or science lab. The placards, which use a combination of color coding and numerical scales to describe a hazard's severity, have been used since the 1950s to provide emergency responders with a simple, readily recognized system to determine the appropriate response to a fire, spill, or similar emergency. The combination of color coding and simplified ... [MORE](#)



Chapter 10: Means of Egress

General Comments ... The general criteria set forth in Chapter 10 regulating the design of the means of egress are established as the primary method for protection of people in buildings. Chapter 10 provides the minimum requirements for means of egress in all buildings and structures. Both prescriptive and performance language is utilized in this chapter to provide for a basic approach in the determination of a safe exiting system for all occupancies... [MORE](#)

ICC Update Report: [Download February report](#)

Get Involved in Code Development in Person or Online. Who determines if your workplace is safe? Building and fire codes have a lot to say about it. And during code development your vote does count ... [MORE](#)

Fire Code Officials Utilize the “Cloud” to Develop Fire Safety And Building Construction Codes.

Your codes will be part of an online effort to create safe and resilient local communities. By Fulton Cochran, Deputy Fire Marshal - Retired, Henderson, Nevada ... [MORE](#)

Make a Difference - Improve the Safety of Firefighters and the Public in the Built Environment.

Get Involved in Code Development in Person or Online - Your Participation Counts! By Adolf Zubia, current Chairman of the ICC Fire Code Action Committee ... [MORE](#)



[FIRE INCIDENT NEWS](#) | [BREAKING NEWS](#) | [MASS NOTIFICATION SYSTEMS IN THE NEWS](#) | [ARCHIVES](#)

We provide you with continual news updates when they happen Click on the links above to fire hundreds of higher education specific new stories ++ ability to search through years of our news archives.

BREAKING NEWS - Click here to Sign up!

The Center for Campus Fire Safety provides initial notification about fire fatalities that occur on a university or college campus, or that occurred within the town where the campus is located. This data is collected from news sources from around the country, and many times - around the world, and then emailed to you.

MEMBER NEWS & JOB OPPS Want to share? Send your news or job opps to: SupportTeam@campusfiresafety.org



CSHEMA Annual Conference: Washington DC, July 17-22. (The Center will be there!)

Attend CSHEMA's 62nd annual conference at the **Marriott Wardman Park**. More than 18 million people visit Washington, D.C., each year, taking advantage of the monuments, museums, and memorials the city offers. Enjoy the vibrant culture and rich history of the United States' capital city while furthering your knowledge of pertinent EHS issues... [MORE](#)



NEMA Publishes ANSI/NEMA SB 40-2015 Communications Systems for Life Safety in Schools.

The National Electrical Manufacturers Association (NEMA) published ANSI/NEMA SB 40-2015 *Communications Systems for Life Safety in Schools*. This standard covers the application, installation, location, performance, and maintenance of school emergency communications systems and their components. ... [MORE](#)

APPA: White Paper - Fire Prevention on College and University Campuses, was written by The Center for Campus Fire Safety Director Robert Ferrara and Member Jeff Issler for Montclair University, for the APPA Body of Knowledge Library. If you are an APPA member you can download the article from the APPA Website (go to www.appa.org, then MyAPPA, where you can log in, and then access the BOK.) Visit www.appa.org for more.

JENSEN HUGHES Appoints Two Board of Directors Members ... BALTIMORE, MD: JENSEN HUGHES, the result of a merger last year between Rolf Jensen & Associates (The RJA Group) and Hughes Associates has announced the appointment of two new members to the company's Board of Directors... [MORE](#)



FIRE FATALITY STATISTICS

The Center for Campus Fire Safety provides basic information about fire fatalities that occurred on a university or college campus, or that occurred within the town where the campus is located. [Statistics](#)

ABOUT THE CENTER FOR CAMPUS FIRE SAFETY



The Center is the Voice of over 4000 colleges and universities. As a nationwide non-profit, membership based, organization devoted to reducing the loss of life from fire at our nation's campuses, we offer an abundance of free resources to help fire and life safety officials working on college campuses and fire departments with responsibility for a college campus/university.

[Leadership](#) | [Committees](#) | [Sponsors](#) | [Advisory Council](#) | [Members](#)

AFTER THE FIRE

THE MOVIE & COLLEGE TOUR

[\[LEARN MORE\]](#)

ADVERTISE WITH US

250 X 250 X \$250

At a special rate of only \$250, you can get your message out to thousands.

Take advantage of this special offer now. We'll even design your banner ad (size 250X250) at no additional cost.

Our newsletter is distributed to 17,000 on our mailing list, and then re-distributed through several of our non-profit partners.

Campus Fire Safety
for students

fire & life safety outreach

THE CENTER FOR
Campus Fire Safety®

NFPA

Student team to spread Fire Safety Message



Left to Right: Cathy Tabor, Michael J. Swain (The Center), Kyle Mellon, Michael Wailgum, Greg Fasold, Nick Demko, Scott Wiercinski, Tarren Horvath (Fire Science Club), Lorraine Carli (NFPA) and Paul D. Martin (The Center)

We all know the importance of fire prevention; it is something that fire safety educators and fire officials think about daily. But what about today's youth? Are we reaching them?

With that question in mind, The Center for Campus Fire Safety is pleased to announce "Campus Fire Safety for Students," a collaborative campaign that actively works to raise fire and life safety awareness among college students nationwide. The initiative is being spearheaded by the University of New Haven's Fire Science Club, with active support from The Center and the National Fire Protection Association (NFPA).

The Center has been working with the University of New Haven's Fire Science Club for several years and more recently formed The Center's Student Committee with student co-chairs and members.



“We believe the “Student to Student” approach, combined with our existing efforts to provide training and tools to fire safety educators and campus fire officials, will help to expand The Center’s programs to effectively reach the younger audience”, said President Paul D. Martin. “Club members have always been great to work with. They are professional, knowledgeable, dedicated and very anxious to begin their careers in fire and life safety. In fact, over the years several students have made career connections from assisting The Center at our annual Campus Fire Forum” said Martin.

As this effort grows, The Center hopes to add additional student members to team.

Meanwhile, NFPA is no stranger to raising fire safety awareness and providing resources to the public from their Learn Not to Burn programs and Sparky the Fire Dog®, which target young children, to their Remembering When program for older adults. Their technical, educational and marketing expertise will be extremely helpful as we work to launch this program.

“Young adults, many of whom are living away from home for the first time, are suddenly participating in activities that pose fire risks, whether they live on- or off-campus,” said Lorraine Carli, NFPA’s vice president for Outreach and Advocacy. “By working with The Center and the University of New Haven’s Fire Science Club, we can collaboratively encourage and empower students to actively get involved in fire safety, with the ultimate goal of reducing campus fire deaths across the nation.”

Help us spread the message!



The students are using Facebook and Twitter to form a network with other students.

Please encourage students in your university/community to join these groups and stay tuned for more information about the Campus Fire Safety for Students campaign in the coming months.

<https://www.facebook.com/campusfiresafetyforstudents>

<https://twitter.com/CFSstudents>





Additional Resources:

<http://www.nfpa.org/safety-information/for-consumers/occupancies/campus-and-dorm-fires>

<http://www.campusfiresafety.org/Resources/Library.aspx>

<http://www.campusfiresafety.org/TrainingActivities/CentersStudentCommittee.aspx>



FROM THE VICE PRESIDENT

By Michael J. Swain

March 2015

Hello Everyone,

As I sit here filling in for the Vacationing President (a well-deserved vacation) I find myself admiring the current weather. For a few hours today spring is visiting. The sun is out, the temperature is above freezing and there are no storms in the forecast. Having said that, we received 4 more inches of snow last night and the temperature will once again drop below zero tonight and early tomorrow morning.

The Center has been extremely busy despite the frigid cold and record snows that have occurred and seem to be sticking around. There have been sponsors continuing to sponsor the Center and the important work it does. I would like to personally add my thanks to the Sponsors who contribute to the Center and the important work the Center is doing.

Equally important to the Center is its members. Members continue to step up and offer assistance to help the Center get its work done and to move the Center forward.

Committees are starting to become more active in the New Year and will continue their very important work. If you are interested in serving on a committee please contact the Center or check out our website for important information. Speaking of the website Cathy and contributors of articles continue to make the place to go for important information and assistance. Hats off and thank you to Cathy and the other writers that make the Newsletter and website huge successes. As members it is important that you get involved in The Center as it is "your" Center.

Work continues on planning the 2015 Annual Forum which will be held in Niagara Falls New York October 26 through the 29th. The Forum is building up great speakers and vendors to make this a great Forum again this year. I encourage you to go to the website for updates and registration information. I am looking forward to seeing you in New York.

Lastly I want to update you on the status of our

Student Committee at the Center. The students from the Fire Club at the University of New Haven continue to move forward and put in a strong effort in support of the Center for Campus Fire Safety. They now have their own Facebook page and will be working with other social media venues to get the Fire Safety message out to students. Please look for the student message on social media and our website.

I am now going to go and try to enjoy some of spring's short but very well timed visit. I thank all of you for your support of the Center and look forward to working with you in the future. Please take care and stay safe.

Mike

Michael Swain is the Campus Fire Prevention Officer with Environmental Health and Safety at the University of Massachusetts in Amherst. Michael has worked in campus fire safety at the University for 27



FROM THE VICE PRESIDENT

By Michael J. Swain

March 2015

years. Michael also serves as Vice President for The Center for Campus Fire Safety, a nonprofit advocacy group for Campus Fire Safety. Michael has been a member of the Greenfield, Massachusetts Fire Department for 29 years and currently holds the rank of District Chief. Michael is a Past President of the Fire Prevention Association of Massachusetts and is currently serving as secretary of the association. He was the 2008 Fire and Life Safety Educator of the Year for Massachusetts.



Published by The Center for
Campus Fire Safety.

www.campusfiresafety.org

978.961.0410 | [email](#)



OFF-CAMPUS

By Tim Knisely

February 2015

WINTER TIPS

Winter has been and continues to be relentless this year in many parts of the country. Some cities have placed a bounty on PA's famous groundhog Punxsutawney Phil. His prediction of six more weeks of winter didn't warn of the looming cold and snow measured by the foot, rather than by the inch.

If you're in the property management business you have likely had one or more weather related

emergencies at your properties. In the student housing market the heat management of these properties can be more challenging since the tenants often times leave for long periods of time, or choose to not operate the heat at higher temperatures in order to save money.

Unfortunately, not staying on top of these properties can have expensive consequences.

Let's first discuss the prevention of freezing pipes; domestic water,

drain lines, heat lines or sprinklers. Anything with water in the pipe is subject to freezing. It isn't always the freezing that causes the mess, but the thaw. Lower than normal temperatures in your area of the country will have different results depending on the original design of the water systems. Many times the freezing of the pipes is a secondary issue. The primary issue is that the heating system failed, or was turned back or off. Proper maintenance is essential, and checklists

to remind staff to turn the heat on as winter approaches.

Other times it is high winds accompanied with the cold temperatures. Winds will work through cracks and openings in the exterior envelope and can freeze pipes that are in this area. Sealing the openings and insulating the pipe from the cold space will reduce the chances of freezing.



Tenants away for break can permit water breaks to go unnoticed.



OFF-CAMPUS

By Tim Knisely

February 2015

Another suggestion is to monitor the temperature in the space using an alarm. This could be part of the fire alarm system or a security system. Fixed temperature devices will notify a key holder when the temperature drops. This is especially helpful in the event of a heating system failure that can't always be predicted.

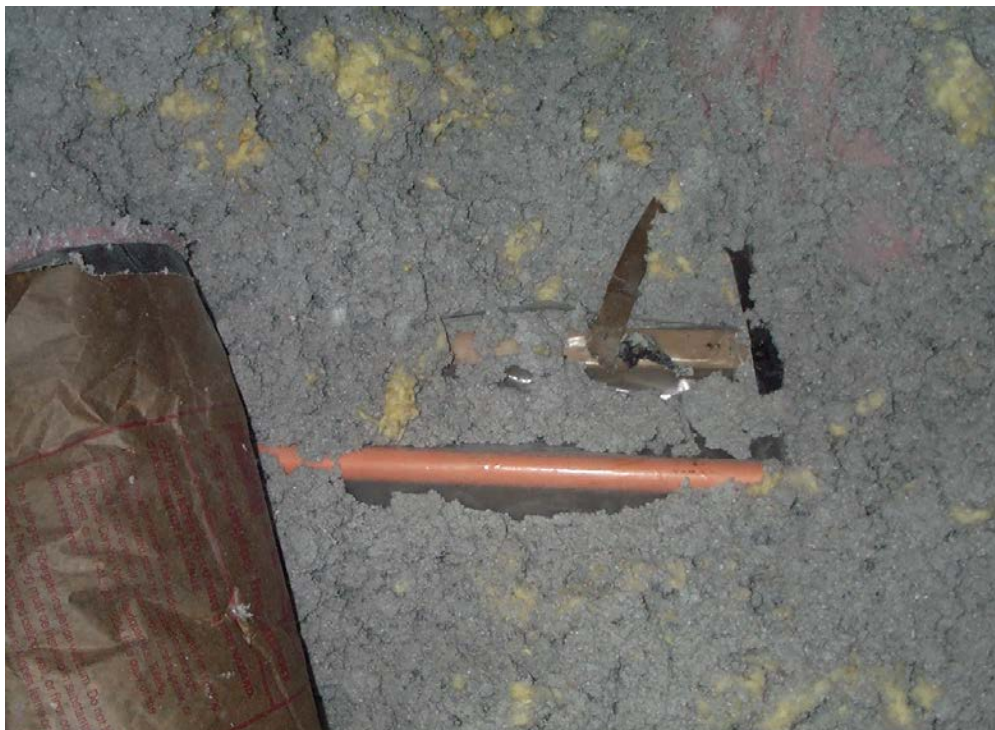
For sprinkler systems where pipes run through an attic and use "tented" insulation over the pipe, the temperature of the room the sprinkler is protecting must be maintained. The heat in this space goes through the drywall and is trapped by insulation, thus keeping the pipe warm. If you have maintenance work conducted in the attic at any time, check the pipe tenting to make sure that plastic or insulation hasn't been disturbed. I've seen this many times when the open chase makes an ideal area to run cable or internet

wiring and then left unsealed. If you have dry systems, verify before the cold weather arrives that the valves are intact and that water has not filled the dry system. Check low-point drains and drum drips to make sure the water is drained.

For the tenant areas, check doors and windows for openings or areas where cold air enters.

Be sure that windows open easily, as well as doors or other emergency egress features.

Suggest to the tenants to leave cupboard doors open to heat these areas and let the cold water on a slow drip to keep water moving through the pipes.



Tented sprinkler pipe was exposed during maintenance, making it susceptible to freezing in the winter.

Be careful not to obstruct exits or egress windows when weather proofing.



OFF-CAMPUS

By Tim Knisely

February 2015

For tenants that have control of their individual heat, consider the installation of thermostats with minimum limit settings. So, if a tenant turns the heat off or below the desired minimum the limit setting will automatically maintain the heat.

On the outside areas, have snow removal crews

be sure to clear snow from the fire escapes, fire hydrants, fire department connections and egress window wells. These are often forgotten areas when the sidewalks and driveways are being cleared. The longer the snow sits in these areas the most likely it will become frozen and nearly impossible to clear in an

emergency.

Use social media to share these cold weather reminders with tenants and their parents. Or, leave reminders at their doors. Most will be cooperative and will help to avoid freezing conditions as it could damage their belongings.

If you have other tips or ideas that are successful during the cold weather months please share these. We will highlight some of these in upcoming articles.

Stay warm!

Tim Knisely

Tim Knisely is on the Board of Directors for The Center and the Senior Fire Inspector for the Centre Region Code Administration in



Snow removal crews have blocked access to the FDC and may have frozen it solid.



OFF-CAMPUS

By Tim Knisely

February 2015

State College, PA.

In this position he manages the Existing Structures Division that administers the fire and property maintenance code in all existing commercial and residential rental properties, and coordinates the life safety education for the community including off-campus and Greek housing.

Tim has been active with The Center for Campus Fire Safety since its inception and served as treasurer from 2007 to 2010.

He is a frequent presenter at Campus Fire Forum, an instructor for the Fire-Wise Campus program and served as project manager for Campus Fire Data.



Published by The Center for
Campus Fire Safety.

www.campusfiresafety.org

978.961.0410 | [email](#)



THE INSPECTOR

By Phil Chandler

February 2015

OMG! Talk about perfect storms! No, not the kind our friends in Boston have encountered, rather those colossal fires, one or two in a generation, that make everyone with an interest in fire safety take notice. The AvalonBay apartment fire of last month in Edgewater New Jersey is a perfect example. As for the campus fire safety community, I dare say that its impact may be as far reaching as the Seton Hall Fire.

For those not closely following this story, public media sources give the following details:

The fire building was of Type V lightweight construction, four stories

in height. The fire destroyed 240 apartments and rendered others uninhabitable. All residents escaped with only a few minor injuries, albeit with only the shirts on their backs. Many were rescued from balconies and escorted to safety by the fire department. Many pets were not so fortunate. All in all, upwards of a thousand people were rendered homeless.

The fire was caused by workers using a hand-held torch to make plumbing repairs in a 1st floor bathroom. As is often the case, said workers attempted to extinguish the fire caused by their carelessness. They delayed reporting the fire

for 15 minutes, even calling their supervisor before the fire department.

The building had residential sprinklers in most habitable areas, excluding the attic and other areas as is often allowed in residential occupancies. The sprinkler system worked as designed, facilitating escape, but was no match for the volume of fire nor was it effective in extinguishing fire in the attic and other concealed spaces.

The type of construction was identified by fire officials as contributing to the sheer volume of fire and its dramatic collapse. Open void spaces, and uncertain fire and draft stopping allowed for rapid spread of the fire. As is now increasingly common, firefighters had to hastily retreat from the building, abandoning offensive interior attack in favor of a defensive exterior attack. Protecting neighboring buildings from





THE INSPECTOR

By Phil Chandler

February 2015

the same fate was a herculean task.

Regular readers of this column will surely recognize many of the facets of this narrative as having been frequent topics of conversation in the past. Fire safety during construction and demolition, including special emphasis on hotwork has long been a favorite. So too has the importance of maintaining fire-resistive compartmentation, to say nothing of early notification of emergency forces when fire is discovered. These topics alone can easily constitute a year of future editorial content as well—stay tuned!

But more importantly for our purposes, is the hue and cry arising after this fire that may impact the future of college construction. This fire, coming on the heels of several other apartment complex fires is forcing a new discussion on the suitability of lightweight wooden construction for

multi-story buildings. Some are arguing, including the Edgewood fire chief, that Type V combustible construction is always a disaster waiting to happen. They further contend that notwithstanding sprinkler systems, robust fire alarm and detection systems along with attention to fire-resistive separation requirements, large wooden structures are just too risky. All it takes is for just one line of defense to be compromised for an unstoppable inferno to erupt. Unlike in noncombustible construction, there is little margin of error.

In New Jersey, similar proposed projects involving Type V construction are meeting with stiff community resistance. As has often been the case in the past, fires in large apartment buildings have spread to neighboring structures. People are on edge. Let's not forget in the wake of the Seton Hall Fire, major revisions to state law

were hurriedly adopted, requiring the installation of sprinklers in many existing buildings. It is not beyond the realm of possibility to see some curtailment of the use of lightweight wooden construction in large structures. Perhaps as New Jersey goes, so goes the nation!

The implication for college construction is obvious. The competition among colleges for increased enrollment has fueled an explosion of new campus construction. Relatively inexpensive wood construction has enabled colleges to offer popular amenities on the cheap. But will they be able to continue this trend in the future? Will we see changes in our building and fire codes requiring more substantial construction methods for residential occupancies?

Even more significant to colleges than the threat of potential code changes, is the nature of new litigation emerging after the Edgewood fire.



THE INSPECTOR

By Phil Chandler

February 2015

Several suits have been filed. Of course, some plaintiffs seek damages arising out of the carelessness of the tradespeople in not appropriately protecting combustible materials during hotwork, further compounding the damages by not reporting the fire promptly. But new more onerous claims have been advanced.

Some plaintiffs allege that the developer was negligent in selecting Type V construction in the first place. They argue that the builder had prior knowledge based on previous fires that this type of construction was inherently prone to catastrophic failure and destruction when exposed to fire. Can colleges claim ignorance of the loss history of wooden construction should a devastating fire occur in one of these buildings on campus?

Of further interest, other plaintiffs are seeking compensation for the disruption in their lives as

a result of becoming suddenly homeless. All of the residents had renters insurance for the loss of possessions, but not for the loss of opportunity and emotional harm caused by the massive fire. How might colleges respond in the aftermath of a fire that left hundreds of students homeless in the middle of a semester? How many colleges would be able to quickly house so many students? Might not students acting as a class seek remedies for the disruptive impact on their education?

Having seen first hand the proliferation of lightweight wooden construction on every campus I visit and also having seen first hand a multitude of unscrupulous shortcuts taken during construction, I do believe we all need to take a hard look at the advisability of seeking short term savings at the expense of safety and longevity in our construction choices. Yes, hopefully, should a fire occur tonight in a wooden

campus residence, all systems will function properly and all students will evacuate safely—this is my prayer. But do we really need to play it so close?

Philip Chandler is a long time firefighter and a fulltime government fire marshal working extensively in the college environment - from large public university centers to small private colleges.

His primary responsibilities include code enforcement and education. Phil welcomes your comments, thoughts and opinions (whether in agreement or opposition) to his viewpoints. He may be reached at: <mailto:theinspector@campusfiresafety.org>

Ask the Inspector
Now Members can log onto the Member Website and have an online discussion with "The Inspector".



THE INSPECTOR

By Phil Chandler

February 2015

Simply visit the [MEMBER LOGIN](#) section of our public website. Once logged in, look for the Town Hall Discussions and ask “The Inspector”.

Note: The viewpoints expressed in The Inspector are those of the author alone. They are offered to initiate thought and debate, however, they do not necessarily represent the views or opinions of The Center for Campus Fire Safety, its officers, directors or its editorial staff.



Published by The Center for
Campus Fire Safety.

www.campusfiresafety.org
978.961.0410 | [email](#)



CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

What is the difference between the NFPA 704 “diamond” and OSHA GHS labels?



You probably have seen the NFPA label or placard on buildings, 55 gallon drums, tanks, storage rooms or even on the door to your chemistry or science lab. The placards, which use a combination of color coding and numerical scales to describe a hazard's severity, have been used since the 1950s to provide emergency responders with a simple, readily recognized system to determine the appropriate response to a fire, spill, or similar emergency. The combination of color coding and simplified hazard rating with numbers ranging from 0-4 allow emergency responders to have the information needed to make fast, safe decisions that are needed in emergency situations. “Should we use water to fight the fire for this material?” “Should we evacuate the area?” The NFPA 704 placard provides immediate answers to these types of questions when emergency responders arrive at the scene.

In 2012 OSHA announced that it was updating its Hazard Communication Standard to include the adoption of the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. The GHS of classification is part of an international effort that, like NFPA 704, provides a standardized approach to classification and labeling of hazardous chemicals, including detailed criteria for determining the dangers posed by chemicals and standardized label elements assigned by hazard class and category.



CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

The GHS system utilizes numbers from 1-4 to determine what information will be placed on a label.

The initial reaction to OSHA's adoption of GHS and its impact on NFPA 704 labels was one of concern. How could there be two types of systems related to chemical hazards, both of which use numbers? However, upon further examination, the answer was clear. The two systems are not only used for different purposes but even the **purpose** of the numbers within these systems is different. NFPA 704 would remain unchanged.

To reiterate-the purpose of NFPA 704, *Identification of the Hazards of Materials for Emergency Response*, is to assist those who are responding to an emergency such as a fire or spill. Three of the four quadrants of the NFPA "diamond" are color coded to indicate the flammability (red) health (blue) and instability (yellow) ratings of the material in an emergency situation. Numbers placed in those colored quadrants range from 0-4 with zero indicating the lowest hazard and 4 being the highest hazard. A fourth quadrant (white) is reserved for special hazards. The symbols W (water reactive), Ox (oxidizer) and SA (simple asphyxiant) are placed in this quadrant if applicable.

In contrast, OSHA's revised Standard, known as Hazard Communication 2012 or HC2012, is a workplace chemical information system whose purpose is to provide information and safe work practices for those working with chemicals under normal conditions of use. The GHS label does not require numbers but does require signal words, pictograms, hazard and precautionary statements. The required signal words, pictograms and statements are selected by correlating the GHS classification numbers now required in Section 2 of the new Safety Data Sheets (SDS) with the information located Appendix C of the Hazard Communication Standard. Unlike the NFPA 704 system, the GHS numbers themselves are not placed on the label. The Hazard Communication label is not meant to be an emergency response system nor is the



CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

NFPA 704 system meant to provide workers with all the information about working with and exposures to a particular chemical.

The confusion occurs because the HC2012 standard incorporates a numerical rating system that appears to be similar to NFPA 704 rating system, however the “severity” rating on the two standards are inverted. NFPA 704 uses a numerical of 0-4 with 4 indicating the most severe hazard. Hazard Communication 2012 uses a numerical system of 1-4 with 4 indicating the least hazardous chemical classification. The inverse numerical rating between the two systems is primarily what creates the concern. If someone who is creating the NFPA 704 label does not understand that the numbers provided in Section 2 on the SDS are NOT the NFPA 704 numbers then a critical mistake could occur if those numbers are transcribed on the NFPA 704 placards.

To address this concern, NFPA has been working with OSHA to promote awareness of the differences between the two systems. It should be noted that OSHA recognizes the difference between the two systems and does not necessarily see a conflict between HCS and NFPA 704. OSHA and NFPA worked together to develop a “Quick Card” showing the differences between the two systems. The card can be downloaded and laminated as a two sided document that can be laminated and used for easy field reference.

You may view the NFPA 704 standards free of charge by going to www.nfpa.org/704 and clicking on the “Current and Prior Editions” tab. You can download the Quick card at the bottom of the page under the “About” tab under Additional Information or you may go directly to the card at http://www.nfpa.org/Assets/files/AboutTheCodes/704/NFPA704_HC2012_QCard.pdf

The NFPA Technical Committee on Classification responsible for NFPA 704 will continue to assess the impact of GHS incorporation into OSHA’s HC2012 standard. In the meantime, there is no immediate plan to change the existing NFPA 704 system. The Committee recognizes that the NFPA 704 consensus standard has been protecting



CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

emergency responders, employees, and the public for over 50 years and any changes would need to be carefully considered. The NFPA 704 document can be viewed free of charge at www.nfpa.org/704.



Nancy Pearce is a Certified Industrial Hygienist and a Senior Fire Protection Engineer at the National Fire Protection Association, working in the NFPA Industrial and Chemical Engineering Division. In that role she serves as staff liaison to 9 technical committees that develop various codes and standards including NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response. Nancy has a degree in Chemistry and a Masters in Civil Engineering and Environmental Policy from Tufts

University.



The Center for Campus Fire Safety

978.961.0410

SupportTeam@campusfiresafety.org



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

Chapter 10:

Means of Egress

General Comments

The general criteria set forth in Chapter 10 regulating the design of the means of egress are established as the primary method for protection of people in buildings.

Chapter 10 provides the minimum requirements for means of egress in all buildings and structures. Both prescriptive and performance language is utilized in this chapter to provide for a basic approach in the determination of a safe exiting system for all occupancies. It addresses all portions of the egress system and includes design requirements as well as provisions regulating individual components. The requirements detail the size, arrangement,

number and protection of means of egress components. Functional and operational characteristics also are specified for the components that will permit their safe use without special knowledge or effort.

A zonal approach to egress provides a general basis for the chapter's format through regulation of the exit access, exit and exit discharge portions of the means of egress. Section 1001 includes the administrative provisions.

Section 1002 shows a list of defined terms that are primarily associated with Chapter 10. Sections 1003 through 1013 include general provisions that apply to all three components of a means of egress system: exit access, exit and exit discharge. The exit access

requirements are in Sections 1014 through 1019, the exit requirements are in Sections 1020 through 1026 and the exit discharge requirements are in Section 1027.

Section 1028 includes those means of egress requirements that are unique to an assembly occupancy.

Emergency escape and rescue opening requirements are in Section 1029. Section 1002 through 1029 are duplicated text from Chapter 10 of the International Building Code® (IBC®) and are fully applicable to new buildings constructed after adoption of the code. The code has one additional section at the end of the chapter dealing with maintenance of the means of egress (see commentary, Section



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

1001.3). For means of egress requirements in existing buildings, refer to Chapter 46 of the code or Chapter 34 of the IBC.

The evolution of means of egress requirements has been influenced by lessons learned from real fire incidents.

While contemporary fires may reinforce some of these lessons, one must view each incident as an opportunity to assess critically the safety and reasonability of current regulations.

Cooperation among the developers of model codes and standards has resulted in agreement on many basic terms and concepts. The text of the code, including this chapter, is consistent with these national uniformity efforts.

National uniformity in an area such as means of

egress has many benefits for the fire code official and other code users. At the top of the list are the lessons to be learned from experiences throughout the nation and the world, which can be reported in commonly used terminology and conditions that we can all relate to and clearly understand.

Purpose

A principal purpose of codes in general, and building and fire codes in particular, is to safeguard life in the presence of a fire. Integral to this purpose is the path of egress travel for occupants to escape and avoid a fire.

Means of egress can be considered the lifeline of a building. The principles on which means of egress are based and that form the fundamental criteria for requirements are to

provide a means of egress system:

1. That will give occupants alternative paths of travel to a place of safety to avoid fire.
2. That will shelter occupants from fire and the products of combustion.
3. That will accommodate all occupants of a structure.
4. That is clear, unobstructed, well marked and illuminated and in which all components are under control of the user without requiring any tools, keys or special knowledge or effort.

History is marked with the loss of life from fire. Early as well as contemporary multiple fire fatalities can be traced to a compromise of one or more of the above principles.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

Life safety from fire is a matter of successfully evacuating or relocating the occupants of a building to a place of safety. As a result, life safety is a function of time: time for detection, time for notification and time for safe egress. The fire growth rate over a period of time is also a critical factor in addressing life safety. Other sections of the code, such as protection of vertical openings (Chapter 7), interior finish (Chapter 8), fire suppression and detection systems (Chapter 9) and numerous others, also have an impact on life safety. Chapter 10 addresses the issues related to the means available to relocate or evacuate building occupants.

SECTION 1001

ADMINISTRATION

1001.1 General. Buildings or portions thereof shall be provided with a means of egress system as required by this chapter.

The provisions of this chapter shall control the design, construction and arrangement of means of egress components required to provide an approved means of egress from structures and portions thereof. Sections 1003 through 1029 shall apply to new construction. Section 1030 shall apply to existing buildings.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.

◆The minimum requirements for means of egress are to be incorporated in all structures as specified in this chapter. Application would be effective on the date the code is adopted and placed into effect.

The means of egress in an existing building that experiences a change of occupancy, such as from Group S-2 (storage) to A-3 (assembly), would require reevaluation for code compliance based on the new occupancy as stated in Chapter 34 of the IBC. Similarly, the means of egress in an existing occupancy of Group A-3 in which additional seating is to be provided, thereby increasing the occupant load, would require reevaluation for code compliance based on the increased occupant load.

Fundamental to the level of life safety in any



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

building, whether it is new or many years old, is the provision for an adequate egress system, and it is for that reason that Section 1104 is retroactively applicable to existing buildings that are not undergoing changes as regulated by Chapter 34 of the IBC. The means of egress in existing buildings must also be properly maintained in accordance with Section 1030 if the intended level of safety is to remain for the life of the building.

Reflecting the correlation and compatibility that is a hallmark of the International Codes® (I-Codes®), the exception makes it clear that the means of egress in buildings that are within the scope of the International Residential Code® (IRC®) are to comply with those requirements instead of Chapter 10.

1001.2 Minimum requirements. It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits or the capacity of the means of egress to less than required by this code.

◆ A fundamental concept in life safety design is that the means of egress system is to be constantly available throughout the life of a building. Any change in the building or its contents, either by physical reconstruction or alteration or by a change of occupancy, is cause to review the resulting egress system. As a minimum, a building's means of egress is to be continued as initially approved. If a building or portion thereof has a change of occupancy, the complete egress system is to be evaluated and approved for compliance with the current code

requirements for new occupancies (see IBC Chapter 34).

The means of egress in an existing building that experiences a change of occupancy, such as from Group S-2 (storage) to A-3 (assembly), would require reevaluation for code compliance based on the new occupancy. Similarly, the means of egress in an existing occupancy of Group A-3 in which additional seating is to be provided, thereby increasing the occupant load, would require reevaluation for code compliance based on the increased load. The temptation is to temporarily remove egress components or other fire protection or life safety features from service during an alteration or repair to or temporary occupancy of a building. During such times, a building is frequently



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

more vulnerable to fire and the rapid spread of products of combustion. Either the occupants should not occupy those spaces where the means of egress has been compromised by the construction or the compensating fire safety features should be considered, which will provide equivalent safety for the occupants.

It should be noted that occupants in adjacent areas may also require access to the egress facilities in the area under construction.

SECTION 1002

DEFINITIONS

1002.1 Definitions. The following terms are defined in Chapter 2:

ACCESSIBLE MEANS OF EGRESS.

AISLE.

AISLE ACCESSWAY.

ALTERNATING TREAD DEVICE.

AREA OF REFUGE.

BLEACHERS.

COMMON PATH OF EGRESS TRAVEL.

CORRIDOR.

DOOR, BALANCED.

EGRESS COURT.

EMERGENCY ESCAPE AND RESCUE OPENING.

EXIT.

EXIT ACCESS.

EXIT ACCESS DOORWAY.

EXIT ACCESS RAMP.

EXIT ACCESS STAIRWAY.

EXIT DISCHARGE.

EXIT DISCHARGE, LEVEL OF.

EXIT, HORIZONTAL.

EXIT PASSAGEWAY.

FIRE EXIT HARDWARE.

FIXED SEATING.

FLIGHT.

FLOOR AREA, GROSS.

FLOOR AREA, NET.

FOLDING AND TELESCOPIC SEATING.

GRANDSTAND.

GUARD.

HANDRAIL.

INTERIOR EXIT RAMP.

INTERIOR EXIT STAIRWAY.

MEANS OF EGRESS.

MERCHANDISE PAD.

NOSING.

OCCUPANT LOAD.

PANIC HARDWARE.

PHOTOLUMINESCENT.

PUBLIC WAY.

RAMP.

SCISSOR STAIR.

SELF-LUMINOUS.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

SMOKE-PROTECTED
ASSEMBLY SEATING.

STAIR.

STAIRWAY.

STAIRWAY, EXTERIOR.

STAIRWAY, INTERIOR.

STAIRWAY, SPIRAL.

WINDER.

◆This section lists terms that are specifically associated with the subject matter of this chapter. It is important to emphasize that these terms are not exclusively related to this chapter, but may or may not also be applicable where the term is used elsewhere in the code.

Definitions of terms can help in the understanding and application of the code requirements. The purpose for including a list within this chapter is to provide more convenient access to

terms that may have a specific or limited application within this chapter.

For the complete definition and associated commentary, refer back to Chapter 2. Terms that are italicized provide a visual identification throughout the code that a definition exists for that term. The use and application of all defined terms are set forth in Section 201.

SECTION 1003

GENERAL MEANS OF EGRESS

[B] 1003.1 Applicability. The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed

elsewhere in this chapter.

◆The requirements in the chapter address the three parts of a means of egress system: the exit access, the exit and the exit discharge. This section specifies that the requirements of Sections 1003 through 1013 apply to the components of all three parts of the system.

For example, the stair tread and riser dimensions in Section 1009 apply to interior exit access stairways, such as those leading from a mezzanine, and also apply to enclosed exit stairways per Section 1022, exterior exit stairways per Section 1026 and steps in the exit discharge per Section 1027.

The following sections are applicable for all parts of the means of egress:

- Section 1003 deals with the path for means of



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

egress to remain free of obstructions and tripping hazards.

- Section 1004 provides criteria for determining occupant loads for a space. These numbers are used for determining means of egress, as a threshold for some suppression requirements and to determine the required plumbing fixture count.

- Section 1005 deals with the required size (i.e., width) of the path of travel for emergency evacuation.

It is important not to create a “bottleneck” that could increase the amount of time necessary for occupants to exit the buildings.

- Section 1006 deals with illumination for the path of travel for the means of egress. Both general lighting and emergency

backup lighting are addressed.

- Section 1007 - Chapter 11 indicated how to get people with mobility impairments into a building.

Section 1007 explains the options to allow people with mobility impairments to self-evacuate or how to arrange for assisted rescue. The accessible means of egress is an important part of the fire and safety evacuation plans (see Section 1001.4).

- Section 1008 includes requirements for doors, gates and turnstiles that are part of the path of travel from any occupied spaces. For example, doors that lead to a walk-in closet must comply with this section, but doors for reach-in closets are exempted.

- Section 1009 provides

information on all types of stairways: both interior and exterior; and from one riser to stairways with multiple flights and landings. Aisle steps for areas within assembly seating are specifically addressed in Section 1028.

- Section 1010 deals with ramps. Aisle ramps serving assembly seating areas are specifically addressed in Section 1028. The ramp provisions are coordinated with ICC A117.1 and the 2010 Standard for Accessible Design [formally the Americans with Disabilities Act Accessibility Guidelines (ADAAG), now referred to as the 2010 Standard].

- Section 1011 described where exit signs are required and what criteria they need to meet to be readily visible.

- Section 1012 describes handrail requirements for stairways and ramps.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

Handrails are important for guidance and to arrest a possible fall.

- Section 1013 provides criteria for the vertical portions of barriers that serve to protect people from possible falls at dropoffs greater than 30 inches (762 mm).

[B] 1003.2 Ceiling height. The means of egress shall have a ceiling height of not less than 7 feet 6 inches (2286 mm).

Exceptions:

1. Sloped ceilings in accordance with Section 1208.2 of the International Building Code.
2. Ceilings of dwelling units and sleeping units within residential occupancies in accordance with Section 1208.2 of the International Building Code.
3. Allowable projections

in accordance with Section 1003.3.

4. Stair headroom in accordance with Section 1009.5.

5. Door height in accordance with Section 1008.1.1.

6. Ramp headroom in accordance with Section 1010.6.2.

7. The clear height of floor levels in vehicular and pedestrian traffic areas in parking garages in accordance with Section 406.4.1 of the International Building Code.

8. Areas above and below mezzanine floors in accordance with Section 505.2 of the International Building Code.

◆ Generally, the specified ceiling height is the minimum allowed in any part of the egress path. The exceptions are

intended to address conditions where the code allows the ceiling height to be lower than specified in this section.

This section is consistent with the minimum ceiling height for other areas as specified in Section 1208 of the IBC. The exceptions are pointers to the lower headroom areas permitted in the code. For example, the headroom above and below a mezzanine is 7 feet (2134 mm) minimum.

[B] 1003.3 Protruding objects. Protruding objects shall comply with the requirements of Sections 1003.3.1 through 1003.3.4.

◆ This section begins the provisions that apply to protruding objects and helps to improve awareness of these safety and accessibility-related provisions.

[B] 1003.3.1 Headroom.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

Protruding objects are permitted to extend below the minimum ceiling height required by Section 1003.2 provided a minimum headroom of 80 inches (2032 mm) shall be provided for any walking surface, including walks, corridors, aisles and passageways. Not more than 50 percent of the ceiling area of a means of egress shall be reduced in height by protruding objects.

Exception: Door closers and stops shall not reduce headroom to less than 78 inches (1981 mm).

A barrier shall be provided where the vertical clearance is less than 80 inches (2032 mm) high. The leading edge of such a barrier shall be located 27 inches (686 mm) maximum above the floor.

◆ This provision is applicable to all components of the means

of egress. Specifically, the limitations in this section and those in Sections 1003.3.2 and 1003.3.3 provide a reasonable level of safety for people with vision impairments as well as during emergency events when vision may be obscured by smoke or low lighting.

Minimum dimensions for headroom clearance are specified in this section. The minimum headroom clearance over all walking surfaces is required to be maintained at 80 inches (2032 mm). This minimum headroom clearance is consistent with the requirements in Section 1009.5 for stairs and Section 1010.6.2 for ramps. Allowance must be made for door closers and stops, since their design and function necessitates placement within the door opening.

The minimum headroom

clearance for door closers and stops is allowed to be 78 inches (1981 mm) [see Figure 1003.3.1(1)]. The 2-inch (51 mm) projection into the doorway height is reasonable since these devices are normally mounted away from the center of the door opening, thus minimizing the potential for contact with a person moving through the opening.

This is consistent with the exception in Section 1008.1.1.1.

The limitation on overhangs is of primary importance to those individuals with visual impairments.

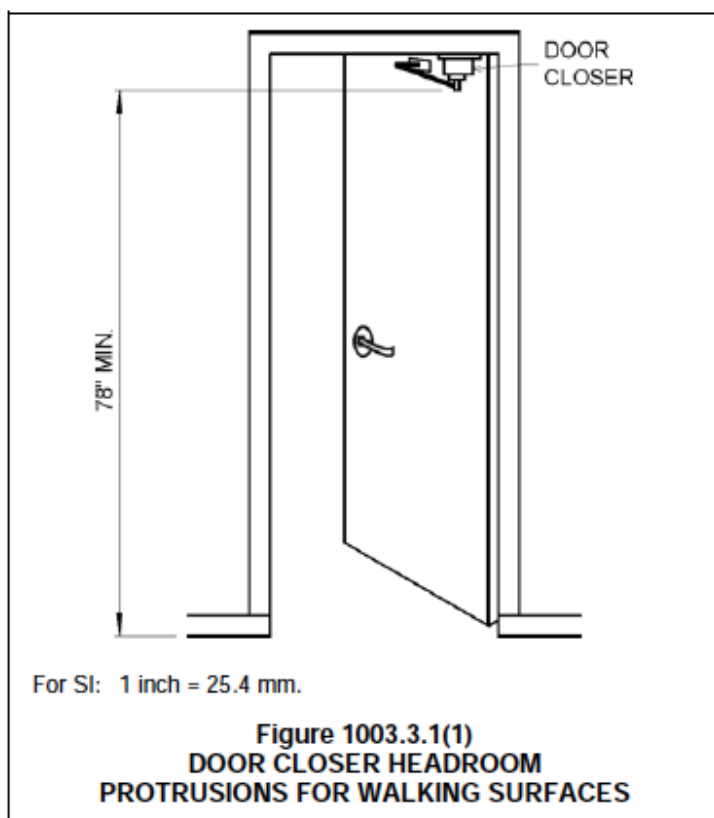
When vertical clearance along a walking surface is less than 80 inches (2032 mm), such as underneath the stairway on the ground floor, some sort of barrier that is detectable by a person using a cane must be provided. This



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council



can be a full-height wall, a rail at or below 27 inches (686 mm), a planter, fixed seating, etc. A low curb is not effective as a barrier. A person with visual impairments might mistake it for a stair tread, step up onto it and

strike their head. A rail at handrail height would not be detectable by a person using a cane, and he or she could possibly walk into the rail before detecting it. Also, when making decisions on the choice of type of barrier, keep in mind that persons

of shorter stature and children have a detectable range that may be below 27 inches (686 mm) [see Figure 1003.3.1(2)].

[B] 1003.3.2 Post-mounted objects. A free-standing object mounted on a post or pylon shall not overhang that post or pylon more than 4 inches (102 mm) where the lowest point of the leading edge is more than 27 inches (686 mm) and less than 80 inches (2032 mm) above the walking surface. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (686 mm) maximum or 80 inches (2032 mm) minimum above the finished floor or ground.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

Exception: These requirements shall not apply to sloping portions of handrails between the top and bottom riser of stairs and above the ramp run.

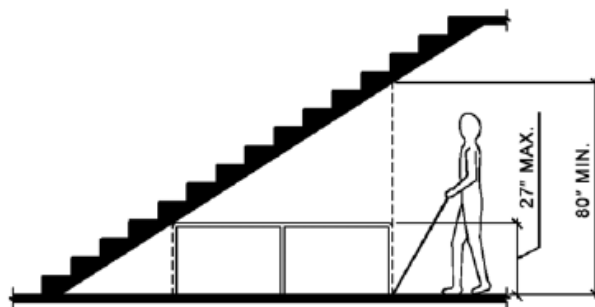
Post-mounted objects, such as signs or some types of drinking fountains or phone boxes, are not permitted to overhang more than 4 inches (102 mm) past the post where the bottom edge is located higher than 27 inches (686 mm) above

the walking surface [see Figure 1003.3.2(1)].

Since the minimum required height of doorways, stairways and ramps in the means of egress is 80 inches (2032 mm), protruding objects located higher than 80 inches (2032 mm) above the walking surface are not regulated. Protrusions that are located lower than 27 inches (686 mm) above the walking surface are also permitted since they are more readily

detected by a person using a long cane, provided that the minimum required width of the egress element is maintained. This is consistent with the post-mounted objects requirements in Section 307.3 of ICC A117.1. The intent is to reduce the potential for accidental impact for a person who is visually impaired.

When signs are provided on multiple posts, the posts must be located



For SI: 1 inch = 25.4 mm.

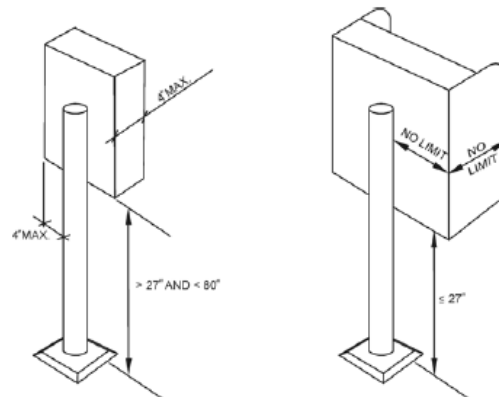
Figure 1003.3.1(2)
REDUCED VERTICAL CLEARANCE



C+S and more

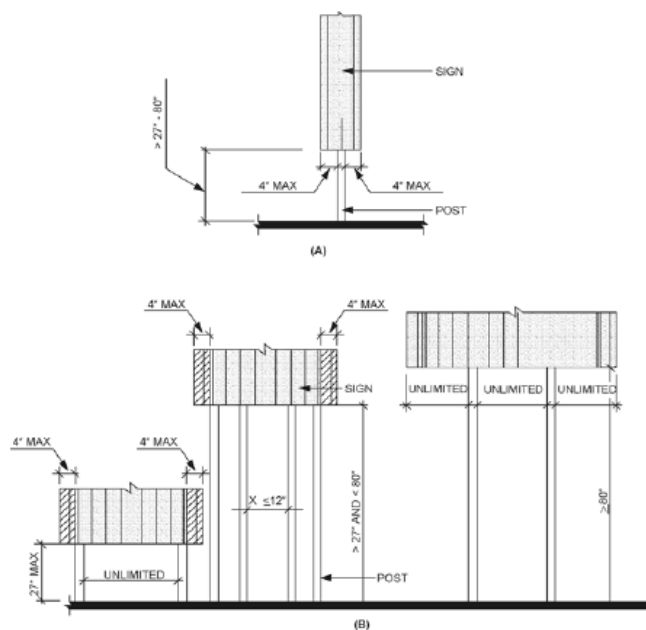
ICC CODE CORNER 2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council



For SI: 1 inch = 25.4 mm.

Figure 1003.3.2(1)
POST-MOUNTED OBJECTS



For SI: 1 inch = 25.4 mm.

Figure 1003.3.2(2)
POST-MOUNTED PROTRUDING OBJECTS



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

mm) apart, or the bottom edge of the sign must be lower than 27 inches (686 mm) so it is within detectable cane range or above 80 inches (2032 mm) so that it is above headroom clearances [see Figure 1003.3.2(2)].

The exception is intended for handrails that are located along the run of a stairway flight or ramp run.

The extensions at the top and bottom of stairways and ramps must meet the requirements for protruding objects where people walk perpendicular to the stair or ramp.

[B] 1003.3.3 Horizontal projections. Structural elements, fixtures or furnishings shall not project horizontally from either side more than 4 inches (102 mm) over any walking surface between the heights of 27 inches (686 mm) and 80 inches

(2032 mm) above the walking surface.

Exception: Handrails are permitted to protrude 4 1/2 inches (114 mm) from the wall.

Protruding objects could slow down the egress flow through a corridor or passageway and injure someone hurriedly passing by or someone with a visual impairment.

Persons with a visual impairment, who use a long cane for guidance, must have sufficient warning of a protruding object. Where protrusions are located higher than 27 inches (686 mm) above the walking surface, the cane will most likely not encounter the protrusion before the person collides with the object.

Additionally, people with poor visual acuity or poor depth perception may have difficulty identifying protruding objects higher

than 27 inches (686 mm).

Therefore, objects such as lights, signs and door hardware, located between 27 inches (686 mm) and 80 inches (2032 mm) above the walking surface, are not permitted to extend more than 4 inches (102 mm) from each wall (see Figure 1003.3.3). The requirement for protrusions into the door clear width in Section 1008.1.1.1 is different because it deals with allowances for panic hardware on a door. It is not the intent of this section to prohibit column, pilasters or wing walls to project into a corridor as long as adequate egress width is maintained. These types of structural elements are detectable by persons using a long cane.

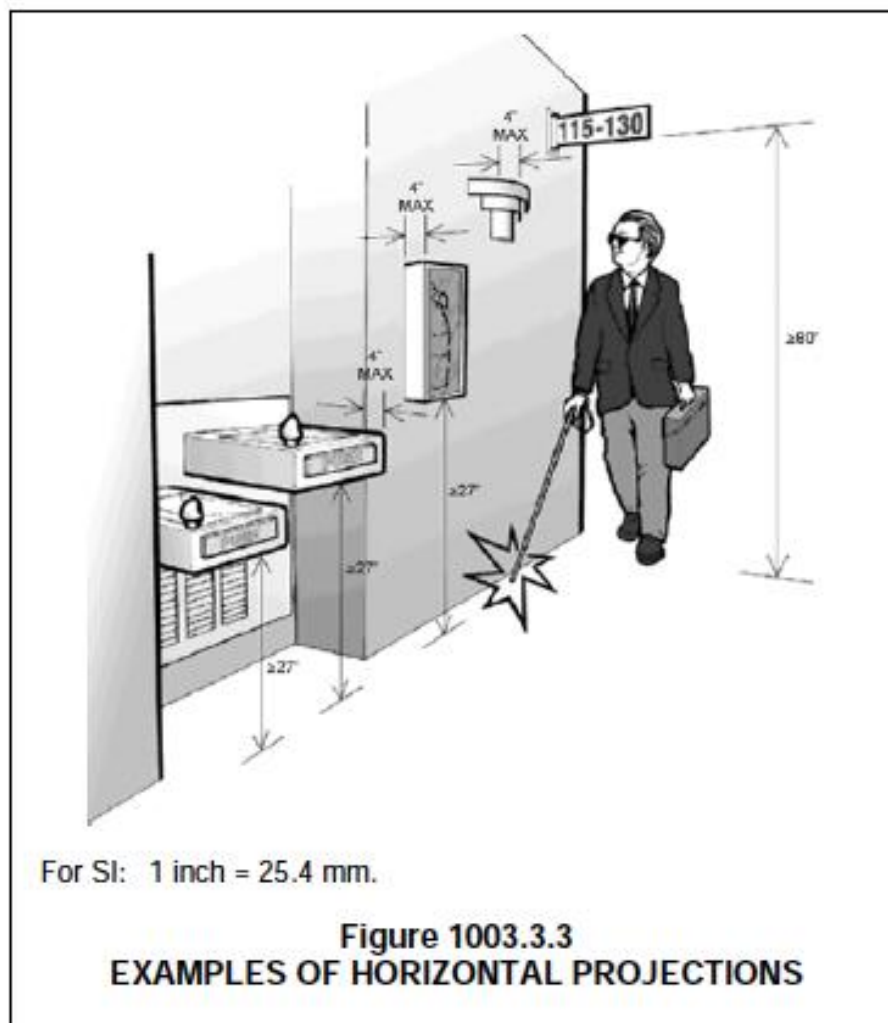
The exception is an allowance for handrails



C+S and more

ICC CODE CORNER 2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council



when they are provided along a wall, such as in some hospitals or nursing homes. The 4 1/2 inches

(114 mm) is intended to be consistent with projections by handrails into the required width of

stairways and ramps in Section 1012.8. There are additional requirements when talking about the required width (see Section 1005.2).

[B] 1003.3.4 Clear width. Protruding objects shall not reduce the minimum clear width of accessible routes.

◆ The intent of this section is to limit the projections into an accessible route so that a minimum clear width of 36 inches (914 mm) is maintained along the route.

ICC A117.1 is referenced by Chapter 11 for technical requirements for accessibility. ICC

A117.1, Section 403.5, allows the accessible route to be reduced in width to 32 inches (914



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

mm) for segments not to exceed 24 inches (635 mm) in length and spaced a minimum of 48 inches (1219 mm) apart. This allows for movement through a doorway or through a gap in planters or counters.

[B] 1003.4 Floor surface. Walking surfaces of the means of egress shall have a slip-resistant surface and be securely attached.

◆As the pace of exit travel becomes hurried during emergency situations, the probability of slipping on smooth or slick floor surfaces increases. To minimize the hazard, all floor surfaces in the means of egress are required to be slip resistant. The use of hard floor materials with highly polished, glazed, glossy or finely finished surfaces should be avoided.

Field testing and uniform

enforcement of the concept of slip resistance are not practical. One method used to establish slip resistance is that the static coefficient of friction between leather [Type 1 (Vegetable Tanned) of Federal Specification KK-L-165C] and the floor surface is greater than 0.5. Laboratory test procedures, such as ASTM D 2047, can determine the static coefficient of resistance. Bulletin No. 4 titled "Surfaces" issued by the U.S. Architectural and Transportation Barriers Compliance Board (ATBCB or Access Board) contains further information regarding slip resistance.

[B] 1003.5 Elevation change. Where changes in elevation of less than 12 inches (305 mm) exist in the means of egress, sloped surfaces shall be used. Where the slope is greater than one unit

vertical in 20 units horizontal (5-percent slope), ramps complying with Section 1010 shall be used. Where the difference in elevation is 6 inches (152 mm) or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

Exceptions:

1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2, R-3, S and U at exterior doors not required to be accessible by Chapter 11 of the International Building Code.

2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapter 11 of the



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

International Building Code, provided that the risers and treads comply with Section 1009.7, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.

3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by Chapter 11 of the International Building Code, provided that the risers and treads comply with Section 1028.11 and the aisle is provided with a handrail complying with Section 1028.13.

Throughout a story in a Group I-2 occupancy, any change in elevation in

portions of the means of egress that serve non-ambulatory persons shall be by means of a ramp or sloped walkway.

◆Minor changes in elevation, such as a single step that is located in any portion of the means of egress (i.e., exit access, exit or exit discharge) may not be readily apparent during normal use or emergency egress and are considered to present a potential tripping hazard. Where the elevation change is less than 12 inches (305 mm), a ramp or sloped surface is specified to make the transition from higher to lower levels.

This is intended to reduce accidental falls associated with the tripping hazard of an unseen step. Ramps must be constructed in accordance with Section 1010.1. The presence of the ramp must be readily

apparent from the directions from which it is approached. Handrails are one method of identifying the change in elevation. In lieu of handrails, the surface of the ramp must be finished with materials that visually contrast with the surrounding floor surfaces.

The walking surface of the ramp should contrast both visually and physically.

None of the exceptions are permitted along an accessible route required for either entry or egress from a space or building.

Exception 1 allows up to a 7-inch (178 mm) step at exterior doors to avoid blocking the outward swing of the door by a buildup of snow or ice in locations that are not used by the public on a regular basis (see

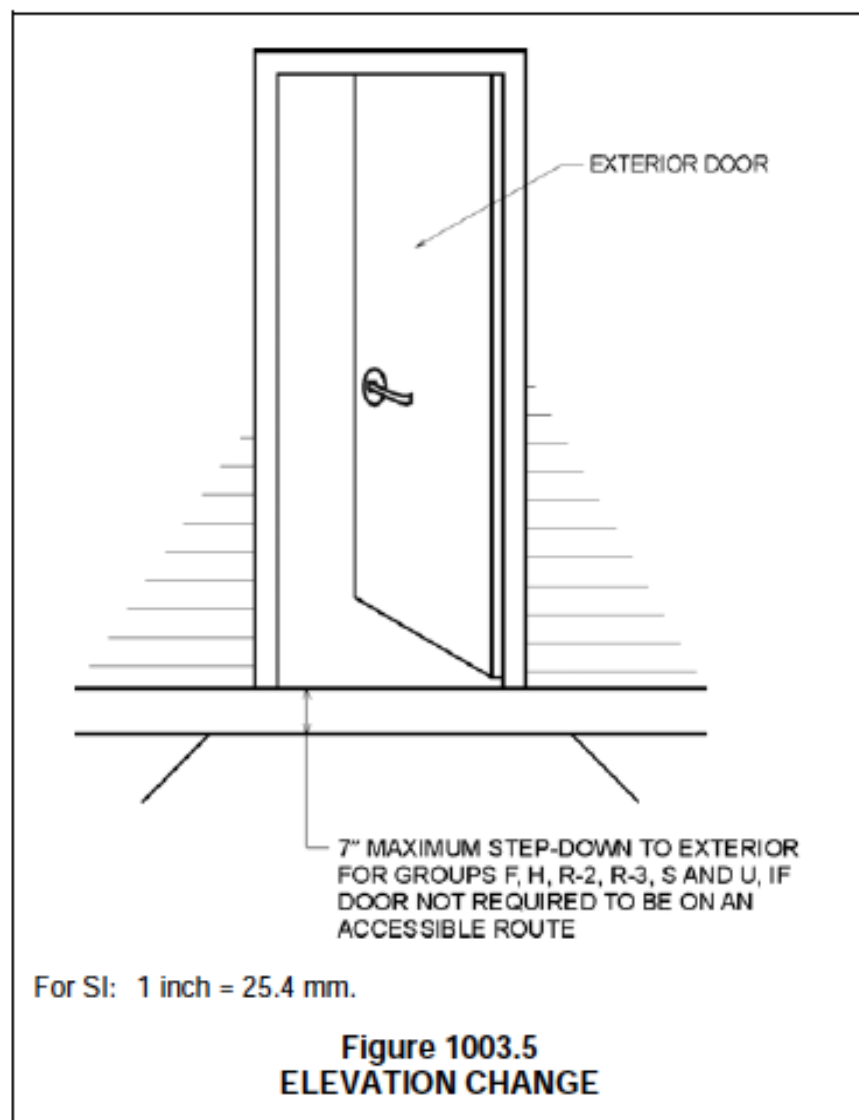
Figure 1003.5). This exception is coordinated



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council



with Exception 2 of Section 1008.1.5, and is only applicable in occupancies that have relatively low occupant densities, such as factory and industrial structures.

This exception is not applicable to exterior doors that are required to serve as an accessible entrance or that are part of a required accessible route. If this exception is utilized at a Group R-2 or R-3 occupancy, the designer may want to consider the issues of potential tripping hazards if this is a common entrance for a large number of occupants.

Exception 2 allows the transition from higher to lower elevations to be accomplished through the construction of stairs with one or two risers. The pitch of the stairway, however, must be shallower than that



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

required for typical stairways (see Section 1009.7.2).

Since the total elevation change is limited to 12 inches (305 mm), each riser must be approximately 6 inches (152 mm) in height. The elevation change must be readily apparent from the directions from which it is approached. At least one handrail is required. It must be constructed in accordance with Section 1012 and located so as to provide a graspable surface from the normal walking path.

Exception 3 is basically a cross reference to the assembly provisions for stepped aisles in Section 1025.

None of the exceptions are permitted in a Group I-2 occupancy (e.g., nursing home, hospital) in areas where non-ambulatory persons may

need access.

The mobility impairments of these individuals require additional consideration.

[B] 1003.6 Means of egress continuity. The path of egress travel along a means of egress shall not be interrupted by any building element other than a means of egress component as specified in this chapter. Obstructions shall not be placed in the required width of a means of egress except projections permitted by this chapter. The required capacity of a means of egress system shall not be diminished along the path of egress travel.

◆The purpose of this section requires that the entire means of egress path is clear of obstructions that could reduce the egress capacity at any point. The egress path is also not

allowed to be reduced in width such that the design occupant load would not be served. Note, however, that the egress path could be reduced in width in situations where it is wider than required by the code based on the occupant load. For example, if the required width of a corridor was 52 inches (1321 mm) based on the number of occupants using the corridor and the corridor provided was 96 inches (2438 mm) in width, the corridor would be allowed to be reduced to the minimum required width of 52 inches (1321 mm) since that width would still serve the number of occupants required by the code.

In the context of this section, a "means of egress component" would most likely be a door or doorway.



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council

[B] 1003.7 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress from any other part of the building.

Exception: Elevators used as an accessible means of egress in accordance with Section 1007.4.

◆Generally, the code does not allow elevators, escalators and moving sidewalks to be used as a required means of egress. The concern is that due to possible power outages, escalators and moving sidewalks may not provide a safe and reliable means of egress that is available for use at all times.

Elevators are not typically used for unassisted evacuation during fire emergencies. However, in taller buildings fire

fighters use the elevators for both staging to fight the fire and assisted evacuation. They can verify that the shaft is not full of smoke, that the elevators will remain operational and, since they know the fire location, what floors the elevator is safe to access. In accordance with the exception, elevators are allowed to be part of an accessible means of egress (i.e., assisted evacuation), provided they comply with the requirements of Section 1007.4. Where elevators are required to serve as part of the accessible means of egress is addressed in Section 1007.2.1. There are new provisions for fire service elevators and occupant evacuation elevators for high rises in Sections 403, 3007 and 3008. These specific provisions will

provide a level of safety that would meet the intent of the means of egress provisions in Chapter 10.

Next Month: SECTION 1004

OCCUPANT LOAD (Page 460)



ICC CODE CORNER

2012 IFC Code & Commentary

Reprinted for Campus Fire Safety e-NewZone with permission from the International Code Council



The International Code Council, a membership association dedicated to building safety and fire prevention, develops the codes used to construct residential and commercial buildings, including homes and schools. Most U.S. cities, counties and states that adopt codes choose the International Codes developed by the International Code Council.



The Center for Campus Fire Safety 978.961.0410 SupportTeam@campusfiresafety.org

International Code Council Government Relations Update – February 2015

Follow @ICC_GR on Twitter for breaking GR news throughout the month!

FREE Registration Now Open for 2015 Committee Action Hearings

This year's Committee Action Hearings, from April 19 – 30 in Memphis, TN, offer ICC Members and all concerned with building safety the opportunity to discuss and debate various code change proposals to the Group A 2018 International Codes. Whether you attend the hearings in person or participate online through cdpACCESS, you help to ensure the next generation of codes includes the latest technical and scientific advancements to benefit public safety. For more information about the hearings and the codes that will be discussed, and to register for FREE, click here:

<https://ww2.eventrebels.com/er/EventHomePage/CustomPage.jsp?ActivityID=12038&ItemID=46216> .

Important Date for Code Development Voter Validation

With the Code Development Cycle to develop the 2018 I-Codes Group A Codes underway, there is an important date to be aware of in order to vote on code changes: March 20. Jurisdictions must be an ICC Member by March 20, 2015, to be eligible to vote during this cycle, and Primary Representatives must validate Governmental Member Voting Representatives by that date to be eligible to participate in the Online Assembly Floor Motion vote that will follow the Committee Action Hearing. Click here to validate:

<https://av.iccsafe.org/eweb/dynamicpage.aspx?webcode=OrgVoterReg&Site=icc>

New ICC Program Offers Expanded Training Options

ICC's Preferred Provider Program creates an easily accessible network of extensive training opportunities with curricula that have been officially approved by ICC. Learners will benefit from relevant educational programs, expanded topics, and access to educational offerings both onsite and online. Check out the Preferred Provider page here: <http://ppp.iccsafe.org/> Chapters are strongly encouraged to become Preferred Providers!

Department of Energy Releases Report on Cost of Energy Code Enforcement

Researchers at the Department of Energy's Berkeley National Laboratory have discovered that: "This study found that the incremental cost of enforcing energy codes (compared to the cost of already-existing enforcement of other building codes) using a traditional review and inspection process (exclusive of overhead and travel) is typically \$50 or less per home, but may range up to nearly \$200, for residential energy codes; and \$60 to \$145 per building, but may range up to around \$1,000, for commercial energy codes". To read the full report, click here:

http://eetd.lbl.gov/sites/all/files/energy_code_enforcement_cost_phase_2_final_report_101414_clean-1.pdf

Just Arrived - International Solar Energy Provisions

With interest in solar energy systems increasing, the need for a clear understanding of how the code applies to solar installations has become vital for today's code official and the solar industry. The I-Codes have long addressed solar thermal and photovoltaic systems, and the 2015 codes have been improved to provide even greater safety for owners/operators, first responders, and the general public. The new International Solar Energy Provisions (ISEP) brings together all code provisions relating to solar systems into one easy-to-use document. It will also include three important reference standards for solar thermal systems from the Solar Rating and Certification Corporation (SRCC).

This is not a new code. It is a quick and easy way to access the comprehensive provisions related to solar energy systems in the I-Codes your jurisdictions may have already adopted. The ISEP will be available in electronic form on the ICC Bookstore in February. Soft-cover versions are available for pre-order now, and are estimated to ship on March 5, 2015. Early-bird pricing discounts apply until March 31, 2015. See the ICC Bookstore at <http://shop.iccsafe.org/catalog/product/view/id/43202/s/2015-international-solar-energy-provisionsr/> or contact Shawn Martin (smartin@iccsafe.org) for more information.

For the Best Prices on International Codes and More, Make Sure Your ICC Membership is Current

You've probably heard that on January 1, Maryland began compliance to the 2015 International Building Code, International Residential Code, and International Energy Conservation Code. To stay up to date on the new codes and keep pace with the latest innovations, you may need to purchase new Codes, commentaries, educational materials, and ICC online campus courses. Why not get the best prices on the resources you need? Reinstate your ICC Membership today! No other building safety code association has as many I-Code resources and career-building training opportunities available to its Members as ICC.

An affordable ICC Membership also provides exclusive Member-only benefits including:

- Free code opinions from the I-Code experts
- Free I-Code book(s) to new Members
- Staff of Governmental Members can receive free benefits
- Access to employment opportunities and post jobs in the ICC Career Center
- Discounts on professional training and Certification renewal exams
- Savings up to 25% off on code books and training materials

Reinstate now by clicking here:

<http://www.iccsafe.org/Membership/Pages/RenewReinstateMembership.aspx?usertoken={token}&Site=icc>

Building Safety Month 2015 Campaign Rollout

May is coming up soon – and so, ICC will begin the roll out the 2015 Building Safety Month campaign as we get closer to our annual celebration of everyone who plays a part in keeping our built environment

safe and efficient. This year's overall theme is "Resilient Communities Start with Building Codes". The weekly themes are:

- Week 1 - Fire Safety: "Don't Get Burned- Build To Code"
- Week 2 - Weather: "Bounce Back Faster From Disaster- Build To Code"
- Week 3 - Water Conservation/Swimming Pool Safety: "Water Safe, Water Smart- Build To Code"
- Week 4 - Energy: "\$ave Energy- Build To Code"

Fire Code Officials Utilize the “Cloud” to Develop Fire Safety And Building Construction Codes

Your codes will be part of an online effort to create safe and resilient local communities

Across the United States, buildings – from one-family homes to towering skyscrapers – are constructed with strict compliance to a number of codes, covering everything from structural integrity to fire safety to plumbing and energy efficiency. It's easy to take these codes for granted, but behind the most-used suite of codes in the U.S., there is a rigorous development process, which your department or jurisdiction more than likely already participates in. That development process just got a lot more user-friendly, especially for governmental entities.

To give a bit of background, the International Code Council (ICC) is a U.S. based nonprofit association governed by representatives from state and local jurisdictions. ICC supports Federal, State, and local governmental entities by developing model codes and standards which are then reviewed, adapted and adopted as the basis for building safety regulations at all levels of government. The *I-Codes* —including the *International Fire Code* (IFC), *International Building Code* (IBC) and *International Residential Code* (IRC) – support public and first-responder safety and the need for one set of codes without regional limitations. Now, the ICC has introduced cdpACCESS, a collaborative online platform revolutionizing the way the model building construction and fire safety codes are developed. As a result, governmental entities are provided with additional opportunity to participate at all stages of development and benefit from code uniformity that encourages local, affordable construction growth and provides for the safety of our built environment.

For decades, state and local jurisdictions have been participating in ICC's open and transparent code development process. It is an inclusive process that allows input from all stakeholders; including code officials, individuals and groups, elected officials and other representatives of government. They create code change proposals and monitor the proposal's progress, submit comments and weigh in on the impact that current regulations or proposed language would have on the built environment. This all used to be a paper-based, mail-in process, but with cdpACCESS, that process has moved online, where users can create proposals, collaborate easily with anyone across the country or around the world, and submit them for a public vote to be included in the next cycle of codes—all at no cost to the user.

Three simple steps will make you eligible to vote:

1. Make sure your department is a Member (if not, [click here](#) to join) and [signed up to vote](#).
2. [Update](#) your department's “**Designated Voting Representatives**”. This must be completed annually!
3. [Log in to collaborate and vote on code change proposals](#), using cdpACCESS. Online voting opens in May and October 2015.

IMPORTANT: Registration for 2015 **starts January 1**. You must be an ICC Voting Member **before March 20** to vote online for the **2018 Group A Codes:** [IBC-E](#), [IBC-FS](#), [IBC-G](#), [IEBC](#), [IFGC](#), [IMC](#), [IPC](#), [IPMC](#), [IPSDC](#), [IRC-M](#), [IRC-P](#), [ISPSC](#) and [IZC](#).

Group A Committee Action Hearings: Apr. 19-30, 2015, in Memphis, TN.

Online voting will be approximately May 11-22.

Group A Public Comment Hearings: Sep. 30 – Oct. 7, 2015, Long Beach, CA.

Online voting will be approximately October 19-30.

And that's not all. With cdpACCESS, ICC voting members (designated representatives from all levels of government, including the fire service) can now securely vote on those code changes online, where before they would have had to attend the ICC code hearings in person, which, while free to attend, often required travel and lodging expenses that many smaller jurisdictions couldn't (or wouldn't) afford, meaning larger states with bigger budgets got more say.

Those who may not be able to attend the annual meeting and hearings will not miss out on the interactions and testimony as all testimony and commentary made on the floor will be available to be viewed on the cdpACCESS page, allowing those voting remotely to be as informed as possible.

"The ultimate goal is to provide a superior way to develop codes and increase participation in code development," said ICC CEO Dominic Sims, CBO. "We are confident that code development participants and public safety will benefit from cdpACCESS."

The following is a rundown of the list of cdpACCESS features:

- Online collaboration with one or many colleagues;
- View, download and print the Code Change Agenda;
- Online review of hearing testimony and voting on assembly floor motions following the Committee Action Hearing;
- View, download and print the Report of the Committee Action Hearing;
- Online creation, collaboration, and submittal of public comments to the Committee Action Hearing results;
- View, download and print the Public Comment Agenda; and
- Online review of Public Comment Hearing testimony and voting on proposed code changes/public comments following the Public Comment Hearing.

All ICC members are eligible to vote online on assembly floor motions. Only Governmental Member Voting Representatives (agencies, departments & units engaged in administration, formulation or enforcement of laws, regulations or ordinances relating to public health, safety and welfare) and Honorary Members can vote on proposed code changes/public comments. cdpACCESS allows you to participate in code development from a computer or tablet, when you

cannot attend in person – and there's nothing special to install, so it's accessible from any internet connection.

ICC has extensively tested cdpACCESS on a wide variety of Windows and Apple computers and the iPad. cdpACCESS is designed for use on Internet Explorer, Firefox, Safari and Chrome. Internet Explorer version 7 and earlier versions are not supported. Analysis of ICC website traffic has shown this will affect a very small percentage of users.

Support for cdpACCESS includes help by phone and email to answer questions, receive comments and suggestions, and report any system errors. The toll-free cdpACCESS hotline is 855-ICC-CDP-1 (422-2371) Monday through Friday from 7 AM to 7 PM Central; email can be sent to cdpACCESS@iccsafe.org. A schedule of free cdpACCESS webinars can be viewed at www.iccsafe.org/cdpACCESS. To see answers to questions about cdpACCESS, go to www.iccsafe.org/cdpACCESSQA.

The concept of online participation in ICC's Code Development Process dates back to 2001 when off-site voting on code changes was used by the three model code organizations that later consolidated to become the Code Council.

Article by: Fulton Cochran – Chairman, ICC Fire Service Membership Council Governing Committee

Bio:

Fulton Cochran
Deputy Fire Marshal – Retired
Henderson, Nevada

Fulton has been involved in the fire service for over 35 years. He started as a volunteer firefighter in his hometown of Manitou Springs, Colorado. Wanting a career in the Fire Service he worked as a career firefighter and then moved into fire prevention. He was Fire Marshal in Breckenridge, Colorado and an active member of the Fire Marshals Association of Colorado prior to moving to Southern Nevada. For the past 20 years Fulton was with the City of Henderson, Nevada where he was the Deputy Fire Marshal – Engineering. During his tenure, the City of Henderson was the fastest growing city in the country for over 10 years. During this explosive growth Fulton managed the fire plan check team that reviewed the following:

- Master planned communities with over 10,000 homes
- Major infrastructure projects such as a 600 MGD water treatment plant
- Major commercial sites such as regional mall and large strip centers
- Regional distribution centers greater than 750,000 square feet with high piled storage
- Chemical plants with multiple hazards
- High-rise hotels and casinos
- High-rise Hospital and medical office complexes

Fulton has participated in code development starting with the legacy organization ICBO and attended his first code development hearing in 1985. Fulton has worked with the International Code Council (ICC) on numerous committees and councils. He was the International Association of Fire Chiefs (IAFC)

representative on the Performance Code drafting committee. In 2007, he was appointed to the Fire Code Council and in 2010 he was elected as Chairman of this Council. When ICC reformulated the Councils in 2011, creating the current Fire Service Membership Council (FSMC), Fulton was again selected by the governing committee to be the Chairman of the Council, a position he continues to hold after being reelected most recently in Ft. Lauderdale during the 2014 Annual Business Meeting.

Fulton is currently a member of the ICC Codes and Standards Council which advises the ICC Board regarding the technical code committees and code development. Fulton was a member of the cdpACCESS steering committee charged with developing the framework of this program and recommending these actions to the ICC Board of Directors.

In 2013, Fulton was honored by ICC as the recipient of the fire service person of the year award. In 2014 Fulton co-authored the book "Significant Changes to the International Fire Code" 2015 edition.



Get Involved in Code Development in Person or Online

Who determines if your workplace is safe? Building and fire codes have a lot to say about it. And during code development your vote does count.

The next generation of building and fire safety codes will be decided through both in-person participation and online voting. The [International Code Council's new cdpACCESS](#) empowers you to vote on these codes, even if you can't attend the code hearings.

Three simple steps will make you eligible to vote:

1. Make sure your department is a Member (if not, [click here](#) to join) and [signed up to vote](#).
2. [Update](#) your department's "**Designated Voting Representatives**". This must be completed annually!
3. [Log in to collaborate and vote on code change proposals](#), using cdpACCESS. Online voting opens in May and October 2015.

IMPORTANT: Registration for 2015 **starts January 1**. You must be an ICC Voting Member **before March 20** to vote online for the **2018 Group A Codes**: [IBC-E, IBC-FS, IBC-G, IEBC, IFGC, IMC, IPC, IPMC, IPSDC, IRC-M, IRC-P, ISPSC and IZC](#).

Group A Committee Action Hearings: Apr. 19-30, 2015, in Memphis, TN.

Online voting will be approximately May 11-22.

Group A Public Comment Hearings: Sep. 30 – Oct. 7, 2015, Long Beach, CA.

Online voting will be approximately October 19-30.

Need more information? Email the ICC Fire Service Membership Council Governing Committee Members listed on the Fire Service Membership Council webpage. [Just click here!](#)

***Make a Difference – Improve the Safety of Firefighters and
the Public in the Built Environment
Get Involved in Code Development in Person or Online – Your
Participation Counts!***

The International Code Council's Fire Code Action Committee is Active with Code Change Proposals for the 2018 edition of the I-Codes

In July of 2014, the ICC Board of Directors decided to sunset the activities of the Code Technology Committee (CTC). This is being accomplished by re-assigning many of the CTC Areas of Study to the applicable Code Action Committee (CAC). Items assigned to the Fire-CAC included IBC Chapter 7 issues such as labeling of fire-rated glazing; unenclosed stairways; and qualification for fire inspectors and frequency of building inspections for fire code compliance.

The International Code Council (ICC) Fire Code Action Committee (Fire-CAC) <http://www.iccsafe.org/cs/FCAC/Pages/default.aspx> was appointed by the ICC Board of Directors to review the 2015 *I-Codes* and develop code change proposals for the next edition (2018 *I-Codes*) for any matters of concern to the fire service; with specific responsibility to review the fire safety chapters in the *International Building Code* (IBC), the entire *International Fire Code* (IFC), the *International Wildland-Urban Interface Code* (IWUIC) and *International Performance Code*.

The Fire-CAC roster includes ICC members from the International Association of Fire Chiefs (IAFC) – Fire and Life Safety Section Executive Board, the National Association of State Fire Marshals (NASFM), National Volunteer Fire Council (NVFC) and other fire service representatives, building officials and industry code experts. Under the leadership of Chairman Adolf Zubia and Vice Chairman Andy King, with administrative support by ICC staff from the Government Relations and Technical Services Departments, the Fire-CAC generated 15 code change proposals for the 2018 *International Building Code* (IBC) and several other changes to the IBC and International Property Maintenance Code in cooperation with the Building Code Action Committee. These changes address:

- Cooking safety requirements in Institutional Occupancies
- Timing of stair installation in buildings under construction
- Construction requirements for fire-pump rooms
- Maintenance requirements for smoke alarms and carbon monoxide detectors

The Fire-CAC was assisted by four Regional Work Groups (RWGs) that worked by conference call during 2014. These RWGs are comprised of fire service representatives from the IAFC Divisions, NASFM, NVFC and members appointed by ICC. The RWGs are charged with submitting recommended code changes to the Fire-CAC based on regional issues of concern and also address specific topics as assigned by the Fire-CAC.

The FCAC held three meetings in Chicago in 2014 to complete its work and will meet three more times in 2015 to see their Group A code development cycle proposals all the way through the code development process and develop Group B cycle proposals for the *International Fire Code*.

Issues that the Fire-CAC plans to address with code change proposals in 2015 include:

- ✓ Potential conflicts with security lockdown plans and fire evacuation
- ✓ College labs and haz-mat requirements
- ✓ Requirements related to High-rise Combustible (wood) Structures and Cross-Laminated Timber (CLT)
- ✓ OSHA Haz-Com requirements; classification of flammable liquids
- ✓ Cooking in I-2 – cook-top safety technology
- ✓ Requirements for smoke alarms and carbon monoxide detection
- ✓ Fire Inspector qualifications & inspection frequency
- ✓ Combustible dust (recommendation from CSB) and reference to various NFPA standards
- ✓ Retroactive requirements for fire sprinkler systems
- ✓ Fire Sprinkler requirements in S-1 Self-storage facilities
- ✓ Fire protection in vacant buildings
- ✓ Fire protection for historic buildings
- ✓ Safety for roof-top Assembly Occupancies
- ✓ Re-write of IFC Chapter 32 (High-piled Combustible Storage)
- ✓ Fireworks *requirements* and reference to NFPA 1124
- ✓ Requirements for liquid carbon dioxide soda systems
- ✓ Requirements for outdoor stages and other temporary structures
- ✓ Requirements for tents, trade shows and special events
- ✓ Requirements for outdoor idle pallet storage

If you have thoughts and ideas about how to improve the model *I-Codes*; reach out to your organization or state representatives on the Fire-CAC or Fire-RWGs and get involved!

We hope that you will participate in the ICC Annual Conference and Public Comment Hearings in Long Beach, California (September 30th thru October 7th). Information about the Conference and Code Hearings is available on the ICC website at: www.iccsafe.org

Your participation in the code development process at the state and national level is the best way to improve safety in your work environment – buildings that catch fire or require an emergency response. See you in Long Beach!

Article by: Chief Adolf Zubia, EFO, Ret.

Bio:

Adolf Zubia is the current Chairman of the ICC Fire Code Action Committee. He also serves as the Chairman of the IAFC Fire and Life Safety Section.

Adolf was the Chief of the City of Las Cruces (New Mexico) Fire Department from 2001 thru 2009. He held the position of South Carolina State Fire Marshal, being appointed by Governor Nikki Haley in February 2011. Adolf served in that position until August of 2012.

Adolf also served as the President of the ICC Board of Directors in 2008

From: Jensen Hughes rja@interlinegroup.com
Subject: JENSEN HUGHES Appoints Two Board of Directors Members
Date: February 2, 2015 at 9:00 AM
To: cathytabor@comcast.net

JH

Media Contact:
Heather Stickler
JENSEN HUGHES
hstickler@jensenhughes.com
(410) 737-8677

FOR IMMEDIATE RELEASE

JENSEN HUGHES Appoints Two Board of Directors Members

BALTIMORE, MD: JENSEN HUGHES, the result of a merger last year between Rolf Jensen & Associates (The RJA Group) and Hughes Associates has announced the appointment of two new members to the company's Board of Directors.

Michael B. Sellman was formerly the President and CEO of Nuclear Management Company which held operating licenses for eight U.S. nuclear plants. Since 2007, he has run Sellman Consulting Services as well as serving on several nuclear safety oversight committees. Sellman, a 45-year veteran of the power and nuclear energy industry, is a graduate of the University of Minnesota with a B.S. in Physics and also holds an M.S.E. in Nuclear Engineering from Catholic University. He is a current or past member of ten boards for organizations ranging from the Institute of Nuclear Power Operations and the American Nuclear Society to the New Brunswick Power Company and Teens for Christ. His years of experience include a record of increased responsibility for numerous nuclear power plants in the areas of nuclear reactor design, plant management and executive management.

Rick A. Lincicome, AIA, NCARB, served as CEO for Ellerbe Becket, one of the world's oldest and largest design firms. Lincicome guided the company through a merger with AECOM in 2009. Under his direction, Ellerbe Becket became well known for its expertise in hospitals and ambulatory clients, sports stadiums and arenas, central heating and cooling plants and mission critical facilities throughout the world. As an Executive Vice President with AECOM, his role was Director of Global Architecture within their Planning, Design and Development Group. He retired from AECOM in 2013. A graduate of the University of Illinois with Bachelor and Master degrees in Architecture, he later taught architecture at his alma mater. With over 40 years of project experience, Lincicome has led major projects in the healthcare, educational, industrial and government sectors around the world.

According to JENSEN HUGHES CEO Phil Rogers, "We have chosen ***advancing the science of safety*** to describe the essence of what we do. These two gentlemen have the credentials and experience to help guide our people who are dedicated to finding effective and economical solutions to the challenges our clients bring to us," said Rogers. "They will help us focus on our reputation for pushing the envelope of scientific engineering that earns us the opportunity to work on projects that set the bar higher for the science of safety."

About JENSEN HUGHES

JENSEN HUGHES is the global leader in engineering consulting services for the built environment. Our engineers, consultants and scientists evaluate risk and develop cost effective solutions involving fire protection systems design and analysis, code consulting, risk assessment, commissioning and security services. Operating from offices in the USA, Asia, Europe and The Middle East, JENSEN HUGHES consulting teams participate on projects around the world. For more information, call **+1 410-737-8677** or visit jensenhughes.com.

#####

This email was sent to cathytabor@comcast.net by Interline Creative Group
553 N. North Ct. | Palatine | IL | 60067
[Forward to a friend](#) | [Manage Preferences](#) | [Unsubscribe](#)