



**VIRTUAL/TELECONFERENCE
COMMERCIAL BUILDING CODE COUNCIL
4822 Madison Yards Way, Virtual, Madison
Contact: Brad Wojciechowski (608) 266-2112
October 11, 2021**

The following agenda describes the issues that the Council plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the meeting minutes for a record of the actions of the Council.

AGENDA

10:00 A.M.

OPEN SESSION – CALL TO ORDER – ROLL CALL

A. Adoption of Agenda (1-2)

B. Approval of Minutes from August 9, 2021 (3)

C. Reminders: Scheduling Concerns

- 1) Attendance Conflicts Impacting October 11, 2021 Meeting
- 2) Attendance Confirmation for November 8, 2021 Meeting

D. Administrative Matters – Discussion and Consideration

- 1) Department, Staff and Committee Updates

E. Public Agenda Request – Discussion and Consideration (4-17)

- 1) Water Filling Stations for New School Construction and School Expansion/Major Renovation

F. Administrative Rules Matters – Discussion and Consideration

- 1) SPS Suggested Code Changes **(18-58)**
 - a. SPS 362 – Buildings and Structures
 - b. 2021 International Building Code (IBC)
 - c. SPS 363 – Energy Conservation
 - d. 2021 International Energy Conservation Code (IECC)
 - e. SPS 364 – Heating, Ventilating and Air Conditioning
 - f. 2021 International Mechanical Code (IMC)

G. Public Comments

ADJOURNMENT

NEXT MEETING: NOVEMBER 8, 2021

MEETINGS AND HEARINGS ARE OPEN TO THE PUBLIC, AND MAY BE CANCELLED WITHOUT NOTICE.

Times listed for meeting items are approximate and depend on the length of discussion and voting. All meetings are held at 4822 Madison Yards Way, Madison, Wisconsin, unless otherwise noted. In order to confirm a meeting or to request a complete copy of the board's agenda, please call the listed contact person. The board may also consider materials or items filed after the transmission of this notice. Times listed for the commencement of disciplinary hearings may be changed by the examiner for the convenience of the parties. Requests for interpreters for the deaf or hard of hearing, or other accommodations, are considered upon request by contacting the Affirmative Action Officer, 608-266-2112, or the Meeting Staff at 608-266-5439.

**VIRTUAL/TELECONFERENCE
COMMERCIAL BUILDING CODE COUNCIL
MEETING MINUTES
SEPTEMBER 13, 2021**

PRESENT: Jennifer Emberson Acker, Michael Adamavich, Justin Gavin, Steven Harms, William Hebert, Richard Paur, Irina Ragozin

EXCUSED: Kevin Bierce, Steven Howard, Matthew Marciniak, Brian Rinke

STAFF: Brad Wojciechowski, Executive Director; Jameson Whitney, Legal Counsel; Erik Hansen, Consultant, Building Systems-Senior; Garry Krause, Bureau Director, Safety and Buildings; Kimberly Lee, Consultant, Building Systems-Senior; Jason Hansen, Consultant, Building Systems-Adv; Kimberly Wood, Program Assistant-Adv.; Megan Glaeser, Bureau Assistant; and other Department Staff

CALL TO ORDER

Richard Paur, Chairperson, called the meeting to order at 10:00 a.m. A quorum was confirmed with seven (7) members present.

ADOPTION OF AGENDA

Amendments to the Agenda:

- Move item F. Public Agenda Requests before item E. Administrative Rule Matters

MOTION: Michael Adamavich moved, seconded by Steven Harms, to adopt the Agenda as amended. Motion carried unanimously.

APPROVAL OF MINUTES FROM AUGUST 9, 2021

MOTION: William Hebert moved, seconded by Irina Ragozin, to approve the Minutes of August 9, 2021 as published. Motion carried unanimously.

ADJOURNMENT

MOTION: William Hebert moved, seconded by Michael Adamavich, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 11:36 a.m.



PUBLIC AGENDA REQUEST FORM

Instructions:

1. Fill out this form, and then save to your device.
2. Return to the “[Suggest an Agenda Item](#)” page and select the appropriate Board or Council from the Board/Council list.
3. Attach your completed “Public Agenda Request” form and send.

First Name: Nicole

Last Name: Hudzinski

Association/Organization: American Heart Association

Subject: Water filling stations for new school construction and school expansion/major renovation

Issue to Address:

Under current code, “educational facilities” must have 1 drinking fountain per 100 occupants. However, water dispensers, i.e. water filling stations, are not permitted to be substituted for more than 50 percent of the required number of drinking fountains.

Public health concerns, highlighted by the COVID-19 pandemic and growing childhood obesity rates, make a strong case for a requirement that water filling stations or dual water filling stations/fountains replace current water fountain requirements specifically in new school construction and major renovations.

The American Heart Association (AHA) respectfully requests the Commercial Building Code Council amend current code related to **all elementary, middle and high school educational facilities** as follows:

- Replace current code requirement of 1 drinking fountain per 100 occupants with at least 1 bottle filling station per 100 occupants. Specify that at least 50 percent should be dual water filling stations/fountain combination units.
- Require at least 1 bottle filling station on each floor (or wing, or other building section) of a school building
- Require that bottle filling stations are filtered, cooled and regularly cleaned
- Encourage touchless bottle filling stations for sanitary reasons



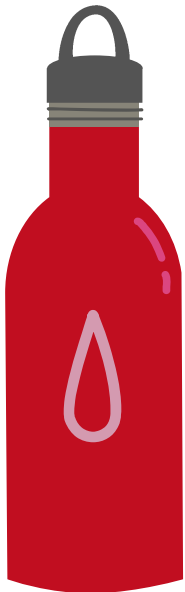
American
Heart
Association.

Q: WHAT IS THE GERMIEST THING IN A SCHOOL?

A: THE WATER FOUNTAIN!

During these unprecedented times, water bottle filling stations and personal water bottles may help reduce the spread of germs and disease.

- Amid the COVID-19 pandemic, the CDC now encourages staff and students to bring their own water to minimize use and touching of water fountains.
- A study by NSF International - The Public Health and Safety Organization (formerly National Sanitation Foundation), revealed **there are more germs found on an average classroom water fountain spigot** than on a toilet seat or animal cage.



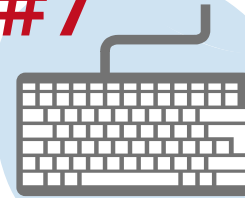
The cost of a water refill station compared to a water fountain is nominal in the process of construction, and can save dollars over time.



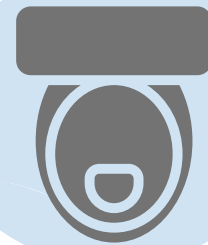
#1



#7



#8



#9





How State Plumbing Codes Can Increase Access to Drinking Water in Schools

For both environmental and health reasons, clean and accessible drinking fountains are making a comeback. This resource provides child health advocates with information on how to modernize school drinking water infrastructure by using their state's plumbing codes.

The traditional drinking fountain is having a renaissance of sorts, thanks to the advent of bottle-filling technology with features such as hands-free activation; filtration; chilling; and counters for plastic bottles saved. Motivated by environmental concerns about plastic trash from disposable water bottles and heightened awareness of plain water's health benefits, college and university campuses throughout the country have upgraded their drinking fountains. Other public spaces such as schools, airports, and hospitals are starting to do the same. There exist two major model plumbing codes which states can use to set minimum standards for drinking water infrastructure in school buildings. In 2015, for the first time, both of these model codes included bottle-filler provisions.

The public health community has long recognized the benefits of increasing water intake in the general population, particularly among children. Access to appealing and safe drinking water benefits child cognition and oral health. Moreover, the substitution of plain water for sugary drinks can help children maintain a healthy body weight.¹ A 2016 study published in *JAMA Pediatrics* found that the installation of water jets in a large sample of public schools in New York City resulted in a reduction in the



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NATIONAL POLICY & LEGAL ANALYSIS NETWORK
TO PREVENT CHILDHOOD OBESITY

Using School Facilities Data to Drive Policy Change

School facilities inventory data can inform school drinking water infrastructure policy in very useful ways. Many states collect this information to assess the condition of their school building stock, prioritize capital improvement funding, and provide information to the public.²⁹ Municipal governments may also require a local school district to conduct a school facilities inventory for use in an annual school budgeting process.

School facilities inventories use lengthy surveys to collect information about the age of school buildings, the number of floors, the number of portable classrooms, student enrollment, square footage, and the condition of building systems, including plumbing. Summary reports are usually provided to the public, and more detailed information can be obtained from the agency that conducted the survey. This information can be used to gauge the impact and effectiveness of a proposed drinking water policy change. The National Center for Education Statistics maintains a list of state agencies that conduct school facilities inventories.³⁰

For example, in 2015, Washington began the process of amending its plumbing code with a proposed provision to require a minimum of one bottle filling station on each floor of buildings otherwise required to have drinking fountains.³¹ According to information collected during a 2014 statewide school facilities inventory,³² 90 percent of school buildings in the state are single-story buildings.³³ This means that, in practice, the one-bottle-filler-per-floor provision would translate to a minimum of one required bottle filler in most school buildings.

To Filter or Not to Filter?

Water filtration can improve the taste and appeal of tap water to students. From a basic safety standpoint, filtration should not be needed in schools with properly maintained plumbing systems that receive water from a regulated public water supplier. School buildings can draw drinking water from a public water supplier or an on-site well. Almost 80 percent of school buildings receive treated drinking water from a public water supplier.³⁴ Schools that have an on-site well are responsible for ensuring that their water meets federal and state water quality laws and regulations.³⁵

Although communities and school districts should be able to count on safe drinking water, recent events in Flint, MI, raise concerns about public water systems particularly in low-income communities. The [Environmental Protection Agency's drinking water webpage](#) and the [Centers for Disease Control and Prevention's public water systems webpage](#) serve as starting points for individuals who want to learn more about drinking water testing and regulation.

Potable water is piped into the building and then circulates through the school plumbing system. Water can become unsafe when it comes into contact with plumbing materials, like lead and copper, which corrode over time and may leach into the water. Sediment containing these toxic substances can build up

Asking the Right Questions

School facilities inventories are conducted using surveys that may not adequately capture information about school drinking water infrastructure. The following can be used as a special supplement to collect in-depth drinking water infrastructure information:

School water source:

Public Water Supplier: _____

On-Site Well: _____

Other: _____

Total number of working drinking fountains per school building: _____

(this information is essential to ensuring that there is an adequate number of fountains to service the student population)

Number of drinking fountains in close proximity to playground: _____

Number of drinking fountains in close proximity to gymnasium: _____

Number of drinking water sources in school cafeteria:

Traditional plumbed drinking fountains with mouth spigot: _____

Standalone bottle fillers: _____

Fountain and bottle-filler combination units: _____

Plumbed, tap water dispensing units: _____

Non-plumbed, tap water dispensing units (food service employees manually filling cups with tap water): _____

Age of drinking water fixtures: _____

Point-of-entry water treatment device in use: ___ Yes ___ No
(If "Yes," describe type, e.g. reverse osmosis): _____

Point-of-use water treatment devices in use on student-accessible drinking fountains: ___ Yes ___ No
(If "Yes," provide total number in use _____)

Point-of-use water treatment devices in use on taps used for food preparation and cooking: ___ Yes ___ No
(If "Yes" provide total number in use _____)

Year of last water quality testing conducted: _____

likelihood of students being obese or overweight.² Thus, many school nutrition policies require that children have access to free drinking water during mealtimes, and these policies focus strongly on drinking water infrastructure in school cafeterias. Yet, almost one-third of US school buildings have plumbing systems in fair or poor condition.³ A number of low-income school districts with children at highest risk for overweight and obesity have struggled with water quality and, in some cases, have had to rely upon bottled water.⁴ This can lead to a situation in which children don't have plain drinking water at school, particularly those children who need it the most.⁵

Over time, as school plumbing systems age, they need to be upgraded. This resource describes how child health advocates can use state plumbing codes to modernize school drinking water infrastructure. It also provides an overview of how to use school facilities data to inform the policy change process, and includes examples of key provisions that can optimize water access in schools.

Moving Beyond the Traditional Drinking Fountain

The drinking fountain, with its familiar bowl and spigot, is both maligned for being poorly maintained and unsanitary, and revered as a symbol of a time when free public drinking water was easier to come by. Fountains were designed for people to get a small drink of water without a cup and without their mouths touching any part of the apparatus. A design that was originally intended to be sanitary and publicly accessible now makes fountains less attractive than bottled beverages to many. Bottled water is typically sold chilled, is perceived as more sanitary than fountain water, and is touted as specially filtered and treated for taste and safety. Consumers are willing to pay an amazingly high premium for bottled water: eight glasses of tap water per day costs 49 cents a year versus \$1,400 for the same amount of bottled water.⁶

Public interest in healthier beverages, concern about plastic trash, and more budget-conscious consumers led to the rise of the reusable water bottle. In 2014, US sales of reusable beverage containers were \$1.5 billion, and sales are expected to continue to grow.⁷ Drinking fountains are a logical place to refill water bottles. The traditional design, however, does not provide enough space between the spigot and the bowl to angle a bottle into position for filling without touching the mouth spigot.

In response to the increase in reusable bottle use, the plumbing fixture industry produced a number of fountain designs that incorporate bottle filling technology. Instead of shooting water up in an arc through a spigot, a bottle filler dispenses water straight down so that a user can quickly fill a receptacle such as a water bottle. These designs were first launched in the late 2000s. In less than ten years, they have been installed on more than 300 US college and university campuses, and installations continue to increase in schools and other public buildings.⁸

School Water Bottle Policies

The Centers for Disease Control and Prevention (CDC) recommends students be allowed to carry reusable water bottles as a way to ensure healthy beverage consumption.⁹ A 2012 CDC study found that the majority of schools surveyed allowed students to carry reusable water bottles during all or part of the school day.¹⁰ Middle and high schools may be concerned about students using water bottles to bring alcoholic drinks into school. One way to deal with this is to require that water bottles be clear. One Oregon school district that implemented such a policy, however, initially had trouble finding a vendor that produced clear bottles.¹¹ If schools do not allow reusable water bottles, or most of their students simply don't use them, they can still encourage water consumption by providing disposable cups next to bottle fillers.

School Drinking Water Infrastructure Policies

State plumbing codes set the basic requirements for drinking water in schools. They are a subset of building codes adopted by state agencies, and enacted and enforced by local governments. State building code and standards agencies periodically update their building code standards.

Since the middle of the 20th century, there has been an emphasis on uniformity in building codes, such as plumbing codes. Technical requirements and up-to-date material performance standards help ensure public safety.¹² The International Code Council and the International Association of Plumbing and Mechanical Officials are the two major model code organizations. They produce the International Plumbing Code (IPC) and the Uniform Plumbing Code (UPC), respectively. In 2012, thirty-six states had adopted the International Plumbing Code, and California, the most populous state in the nation, had adopted the Uniform Plumbing Code.¹³ States can freely amend these model codes and many do.



School Water Fountain Requirements

Primary and secondary school buildings are considered “educational occupancies” and are addressed as such in state plumbing codes. Typically, a minimum number of plumbing fixtures, e.g. toilets and drinking fountains, are required per number of occupants. Plumbing codes can also contain: definitions of drinking fountains and other drinking water fixtures; fountain placement requirements (e.g. a minimum of one fountain per floor); allowable use of water dispensers to substitute for drinking fountains; and accessibility standards to align fixture requirements with the Americans with Disabilities Act.

With respect to school drinking fountains, state plumbing code minimum requirements range from 1 fountain per 30 occupants to 1 fountain per the first 150 occupants and 1 per each 500 occupants thereafter.¹⁴ In 2012, the most widely adopted standard was the International Plumbing Code ratio of 1 drinking fountain per 100 occupants, which allowed up to 50 percent of fountains to be substituted by water dispensers, such as 5-gallon drums.¹⁵ It is important to note that plumbing codes set minimum standards—schools are free to install as many fountains as they’d like to meet the needs of students, faculty and staff.

From Drinking Fountains to Bottle Fillers

In 2000, the IPC contained a provision that allowed 100 percent of required drinking fountains to be replaced by water coolers, such as 5-gallon dispensers.¹⁶ The 2003 model code reduced this substitution rate to a maximum 50 percent, and that standard remains in effect.¹⁷ Some jurisdictions have allowed fee-based bottled water dispensers, e.g. vending machines, to substitute for a certain percentage of required drinking fountains.¹⁸

Despite these policies, according to one bottle filler manufacturer, “drinking fountains are not going away.”¹⁹ At the same time, bottle filling technology has been widely adopted even though only a few jurisdictions recognize or define their permissible use. In order to get around this policy void, bottle fillers have been installed together with traditional fountains. Thus, institutions wishing to install bottle fillers are able to meet the applicable plumbing code’s minimum fixtures requirement while providing a bottle filler as an extra feature.

The 2015 version of the IPC, the mostly widely adopted model plumbing code, recognizes bottle fillers as a type of “water dispenser,” which is defined as a plumbing fixture that is or is not connected to a potable water supply for the purpose of dispensing water into a receptacle such as a cup or bottle.²⁰ The code still allows bottled water dispensers to substitute for up to 50 percent of required fountains.²¹ The 2015 Uniform Plumbing Code added a definition for plumbed “bottle filling stations”²² and notes that drinking fountains “should also incorporate a bottle filling station.”²³ It is now up to state and local jurisdictions to adopt the bottle filler and bottled water provisions as they are written in the model code, or to amend them as they see fit.

Bottle-Filler Policies at the Local Level

Policies to encourage tap water consumption and reduce bottled water use are of great interest to the environmental sustainability movement. As part of an initiative to “green” its building codes, New York City required, effective July 1, 2012, that 100 percent of drinking fountains include a bottle filler feature.²⁴ NYC’s 2012 code change also repealed a 2007 provision allowing for-sale bottled water to substitute for drinking fountains.²⁵ In 2013, the City and County of San Francisco enacted a similar requirement in its Environment Code.²⁶ In 2014, the County of Santa Clara, CA required 1 bottle filler per building floor and 1 additional bottle filler per wing of large single story buildings.²⁷ These policy changes were motivated in whole or in part by environmental sustainability concerns, and exemplify the powerful potential of collaborating with the sustainability movement on drinking water initiatives.

Special Consideration for Elementary Schools

Researchers working in elementary schools have found that bottle fillers can provide drinking water to young children. Special consideration must be paid to students’ height and strength. Bottle fillers should be placed at an age-appropriate height, and children must be able to easily press the button or sensor pad that activates the flow of water.²⁸



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Number of drinking water sources in school cafeteria:

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(If "Yes," describe type, e.g. reverse osmosis): _____

Point-of-use water treatment devices in use on student-accessible drinking fountains: ___ Yes ___ No
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Year of last water quality testing conducted: _____

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Point-of-use water treatment devices in use on taps used for food preparation and cooking: ___ Yes ___ No
(If "Yes" provide total number in use _____)

Year of last water quality testing conducted: _____

over time, especially when a plumbing system is not being used (e.g. over the weekend, during vacation periods), and this can pose a safety hazard to children. To prevent this, many schools flush taps and fountains used for cooking and drinking at the beginning of the school day and after periods of low usage.³⁶ The U.S. Environmental Protection Agency provides comprehensive information about water quality in schools on its [Drinking Water at Schools and Child Care Facilities webpage](#).³⁷

Bringing Fountains Into the Future to Meet the Needs of Today's School Children

This section describes specific, state-level options that policymakers and advocates can pursue to modernize school drinking water infrastructure and support overall child health.

Know Your Ratio

The minimum required number of drinking fountains varies from state to state. Unfortunately, there exists little research into what is the optimal ratio of fountains to building occupants. One analysis of survey data did find that students were less likely to report that fountains were widely available in their school buildings if they lived in states with plumbing codes that required fewer fountains per number of students.³⁸ States can therefore amend their plumbing codes for educational occupancies to provide, for example, at least 1 drinking fountain per 100 occupants.

> Sample Policy Language

- In educational occupancies, drinking fountains shall be provided at a ratio of 1 per ___ building occupants.

Put Water In Its Proper Place

Perhaps just as important as the number of drinking fountains in a school building is their placement. Fountains that are located in remote areas of a campus or areas of a school building that are not accessible to students for the entire day are likely to get little use and may be targets for vandalism. Placement provisions in state plumbing codes merely require at least one drinking fountain per occupied floor in school buildings, or that fountains be “conveniently located” for use by students.³⁹

School cafeterias are a key focus area for placement, as are playgrounds, gymnasiums, and other high-traffic areas. The Healthy, Hunger-Free Kids Act of 2010 requires that schools participating in the National School Lunch Program make drinking water available to students free of charge in the place where meals are served.⁴⁰ Neither the IPC nor the UPC contains a fountain placement provision. The UPC states that where food is served “water stations” may substitute for the traditional drinking fountain, but the UPC does not actually require that water stations be placed in school cafeterias.⁴¹



State plumbing codes can require that drinking fountains, bottle filling stations, and/or other water dispensers be placed in school cafeterias in adequate numbers to service the number of students utilizing the cafeteria during each meal service period. For example, the 2015 IPC requires 1 fountain per each 500 occupants in banquet halls and food courts,⁴² and the 2015 UPC requires 1 fountain per 250 occupants for restaurants and banquet halls that serve up to 750 people.⁴³ In a school cafeteria where water must be accessible without restriction, an adequate number of fixtures could be determined by applying the minimum fixture requirement for the entire building to the food service area specifically. Thus, in a state requiring 1 fountain per 100 school building occupants, a cafeteria designed to seat 300 students per meal service would be required to have at least three student-accessible sources of drinking water.

> Sample Policy Language

- In food service areas, one student-accessible drinking fountain or water station shall be provided for each ___ students served during a typical full meal service. All school food service areas, regardless of the number of students served, shall have at least one student-accessible drinking fountain or water station.
- Drinking fountains shall be placed in close proximity to gymnasiums and outdoor learning and activity areas, including playgrounds and athletic facilities.

Fill It Up!

There are a wide range of options for dispensing tap water in schools.⁴⁴ Bottle fillers have gathered momentum as a complement to drinking fountains. Some local jurisdictions have gone so far as to require that all fountains integrate bottle filler technology, and have even allowed bottle fillers to stand in for up to half the number of required fountains. The drawback is that bottle fillers do not provide a mouth spigot. Therefore, in school settings, bottle-filler-only stations should include cups to ensure that students without a water bottle can get a drink.

> Sample Policy Language

- Where drinking fountains are required, a bottle filling station shall be provided with each fixture installation.
- Bottle filling stations shall be permitted to substitute for up to 50 percent of required drinking fountains.

Cups, Cups, Cups

Children, teens, and adults are used to receiving beverages in containers. At home and in child care, children are taught to drink from cups. Yet, at school, when it comes to accessing tap water—which is likely the least expensive, most environmentally friendly, and healthiest option—students are expected to hover their mouths over a fountain spigot just to get a very small amount of water into their mouths. Cups can encourage plumbed water use and make water more accessible than less-healthy beverages available to children.

A key difference between traditional drinking fountains and bottle fillers is that students must have a cup or reuseable bottle to get a drink from a bottle filler. Cups need to be purchased⁴⁵ and staff time is required to stock them and to dispose of cup trash. West Virginia is currently the only state to require that schools provide cups together with water dispensers during meal service.⁴⁶ The West Virginia State Office of School Nutrition encourages schools to provide cups that hold at least 8 oz. of water, because smaller cups can result in students getting up repeatedly for refills.⁴⁷ In order to keep cup costs down, schools can encourage and support student use of reuseable bottles. Even in schools with a robust culture of reuseable bottle usage, cups provide a safety net for students when they invariably forget their bottles at home or lose them altogether.

> Sample Policy Language

- In food service areas, cups with a minimum capacity of 8 oz. shall be provided.
- Cups shall be provided at all bottle filling stations that do not include a drinking fountain.

Conclusion

Water is the healthy alternative to sugary drinks. Overconsumption of sugary drinks is linked to unhealthy weight gain, tooth decay, and chronic diseases like type-II diabetes. Bottled beverages are heavily marketed, sold in user-friendly containers, and refrigerated, which makes them appealing to students. State and federal school nutrition policies have done a lot to make a healthier mix of bottled beverages available to students during the school day, but plumbed drinking water infrastructure in schools continues to lag behind. This problem is often most acute in low-income and minority communities where heavy marketing of sugary drinks and under-resourced school building infrastructure create an unhealthy beverage environment for children who are already most at risk for diet-related chronic disease. State-level policy change to modernize school drinking water infrastructure is one of many strategies that can increase access to fresh, safe drinking water and reduce the consumption of sugary drinks, with the overarching goal of improving children's health.

Acknowledgments

Written by Cara Wilking, legal consultant.

Support provided by Manel Kappagoda, senior staff attorney, and Kim Arroyo Williamson, senior communications manager. Reviewed by Amy Ackerman, consulting attorney. All affiliated with ChangeLab Solutions.

ChangeLab Solutions is a nonprofit organization that provides legal information on matters relating to public health. The legal information in this document does not constitute legal advice or legal representation. For legal advice, readers should consult a lawyer in their state.

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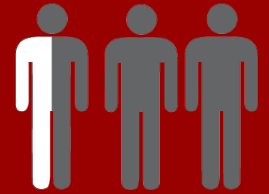
- 1 Ctrs. for Disease Control & Prevention, U.S. Dept. of Health & Human Servs, *Increasing Access to Drinking Water in Schools* 7 (2014), www.cdc.gov/healthyschools/npao/pdf/water_access_in_schools.pdf (last visited Dec. 29, 2015).
- 2 Schwartz A, Leardo M, Aneja S, Elbel B. Effect of a School-Based Water Intervention on Child Body Mass Index and Obesity. *JAMA Pediatr.* Published online January 19, 2016. doi:10.1001/jamapediatrics.2015.3778.
- 3 Debbie Alexander & Laurie Lewis, Nat'l Ctr. for Educ. Stat., U.S. Dept. of Educ., NCEs 2014-022, Condition of America's Public School Facilities: 2012-2013 (First Look) 3 (2014), <http://nces.ed.gov/pubs2014/2014022.pdf> (last visited Dec. 29, 2015).
- 4 Associated Press, *Drinking Water Unsafe at Thousands of Schools* (September 25, 2009), www.msnbc.msn.com/id/33008932/ (last visited Dec. 29, 2015).
- 5 Jeremy C. Fox, *Few fountains, big water bill for Boston schools: System to start replacing old, lead-risk plumbing*, Boston Globe, June 29, 2015.
- 6 Kendra Pierre-Louis, *We don't trust drinking fountains anymore, and that's bad for our health*, Wash. Post, July 8, 2015.
- 7 Serena Ng, *Newell Rubbermaid to Buy Maker of Reusable Water Bottles: Paying \$308 Million for Maker of Contigo, Avex Container*, Wall St. J., July 21, 2014.
- 8 Wendy Koch & Kristi Marohn, *Hydration stations sweep colleges to promote tap water*, USA TODAY, Sept. 15, 2011.
- 9 Ctrs. for Disease Control & Prevention, *supra* note 1, at 28.
- 10 Zewditu Demissie et al., Ctrs. for Disease Control & Prevention, U.S. Dept. of Health & Human Servs, *School Health Profiles 2012: Characteristics of Health Programs Among Secondary Schools* 36 (2013), www.cdc.gov/healthyyouth/profiles/2012/profiles_report.pdf (last visited Dec. 29, 2015).
- 11 Tia Henderson & Stephanie Manfre, *Improving Student Access to Tap Water for Better Health: Results, Lessons Learned and Recommendations From a David Douglas School District Pilot Project* 11 (June 2012), www.upstreampublichealth.org/sites/default/files/Improving%20Student%20Access%20to%20Tap%20Water%20for%20Better%20Health.pdf (last visited Dec. 29, 2015).
- 12 Cara L Wilking et al., *Harnessing the public health power of model codes to increase drinking water access in schools and childcare*, 43 J.L. Med. & Ethics 69 (Supp. 1 2015).
- 13 Stephen J. Onufrak et al., *Student-reported school drinking fountain availability by youth characteristics and state plumbing codes*, 11 Preventing Chronic Disease 130314 (2014).
- 14 *Id.*
- 15 *Id.*
- 16 Wilking, *supra* note 12.
- 17 *Id.*
- 18 *Increase the Availability of Drinking Fountains*, Urban Green Council (2012), <http://urbangreencouncil.org/content/increase-availability-drinking-fountains> (last visited Dec. 29, 2015) (describing the 2010 reversal of a 2007 plumbing code provision that permitted fee-based bottled water dispensers to substitute for up to 50% of required drinking fountains in New York City).
- 19 Karen Dale Dustman, *Need a Refill? Bottle Filling Technology*, Reeves Journal, Dec. 6, 2013.
- 20 2015 Int'l Plumbing Code § 202 (2015); Int'l Code Council, *Complete Revision History to the 2015 I-Codes: Successful Changes with Public Comments: 2015 IPC 42* (2014), www.ecodes.biz/ecodes_support/free_resources/Pennsylvania/PDFs/2015_IPC_Revision_History.pdf (last visited Dec. 29, 2015).
- 21 2015 Int'l Plumbing Code § 410.4 (2015).
- 22 2015 Uniform Plumbing Code § 204 (2015).
- 23 2015 Uniform Plumbing Code § 206 (2015).
- 24 N.Y. City, N.Y., Local Law 55 (2010) (eff. July 1, 2012) (amending the New York City plumbing code).
- 25 Urban Green Council, *supra* note 18.
- 26 S.F., Cal., Environment Code ch. 23 §§ 2301-2306 (2012).
- 27 Santa Clara County, Cal., County Plumbing Code § C11-4 (2015).
- 28 Email communication with Dr. Anisha Patel, MD, Assistant Professor of Pediatrics, University of California, San Francisco (Aug. 11, 2015) (on file with author).
- 29 Nat'l Ctr. for Educ. Stat., U.S. Dept. of Educ., NCEs 2003-400, *Facilities Information Management: A Guide for State and Local Education Agencies* 3 (2003), <https://nces.ed.gov/pubs2003/2003400.pdf> (last visited Dec. 29, 2015).
- 30 Tom Szuba & Roger Young, Nat'l Ctr. for Educ. Stat., U.S. Dept. of Educ., NCEs 2003-347, *Planning Guide for Maintaining School Facilities* 154 (2003), <http://nces.ed.gov/pubs2003/2003347.pdf> (last visited Dec. 29, 2015) (listing state-specific facilities web sites, including many developed by states and state departments of education).
- 31 David Peden, Building Code Technical Advisory Group, State Building Code Council, State of Washington, *Building Code TAG Report* (June 11, 2015) (on file with author).
- 32 Cameron Bell, Washington State Office of Superintendent of Public Instruction, *Summary of the First Annual School Facilities Survey* (Oct. 2014), www.k12.wa.us/SchFacilities/pubdocs/SurveySummary.pdf (last visited Dec. 29, 2015).
- 33 Washington State Office of Superintendent of Public Instruction, *Number of Floors* (2014) (on file with author) (spreadsheet detailing the number of floors per school building inventoried provided upon request).
- 34 Ctrs. for Disease Control & Prevention, US Dept. of Health & Human Servs, *Results from the School Health Policies and Practices Study 2012* 114 (2013), www.cdc.gov/healthyyouth/shpps/2012/pdf/shpps-results_2012.pdf (last visited Dec. 29, 2015).
- 35 Office of Ground Water and Drinking Water, U.S. EPA, EPA 816-B-13-001, *Drinking Water Best Management Practices For Schools and Child Care Facilities With Their Own Drinking Water Source* (April 2013), <http://water.epa.gov/infrastructure/drinkingwater/schools/upload/epa816b13001.pdf> (last visited Dec. 29, 2015).
- 36 Ctrs. for Disease Control & Prevention, *supra* note 34.
- 37 U.S. EPA, *Drinking Water at Schools and Child Care Facilities* (Nov. 9, 2015), www.epa.gov/dwreginfo/drinking-water-schools-and-child-care-facilities (last visited Dec. 29, 2015).
- 38 Onufrak, *supra* note 13.
- 39 *Id.*
- 40 7 C.F.R. § 210.10(a)(1)(i) (2015).
- 41 2015 Uniform Plumbing Code § 415.2 (2015).
- 42 2015 International Plumbing Code § 410.4 (2015).
- 43 2015 Uniform Plumbing Code Table 422.1 (2015).
- 44 Anna Grummon et al., *Water Works: A Guide to Improving Access to and Consumption of Water in Schools to Improve Health and Support Learning* (2014), <http://waterinschools.org/pdfs/WaterWorksGuide2014.pdf> (last visited Dec. 29, 2015) (describing numerous water delivery options for school buildings).
- 45 *Id.* at 55-57.
- 46 W. Va. Code R. § 126-86-8 (2014).
- 47 Telephone conversation with Celeste Peggs, Coordinator, West Virginia Office of Child Nutrition, in Charleston, W. Va. (June 23, 2015).

Water is critical in a child's overall health.



Benefits of Drinking Water:

- Lowers calorie intake¹
- Lowers risk for obesity¹
- Reduces tooth decay¹
- Decreases consumption of sugary drinks¹



Fewer than one-third of children and adolescents drink enough water per day².



Benefits of Water Filling Stations in Schools:

- A study found nearly **2 in 5 students** didn't think their school's traditional water fountain was clean and safe³.
- A CDC report found students had concerns about drinking water at schools, including water safety, poor taste & color and lukewarm temperatures⁴.
- A study found when schools provided free water by a non-fountain source, the percentage of students who drank the water **doubled**⁵.

Recommended Daily Total Water Intake⁶

Children ages 4 – 8:

7 cups a day

Girls ages 9 – 13:

9 cups a day

Boys 9 – 13:

10 cups a day

**total water each day that includes plain drinking water as well as the water content of all foods and beverages consumed*



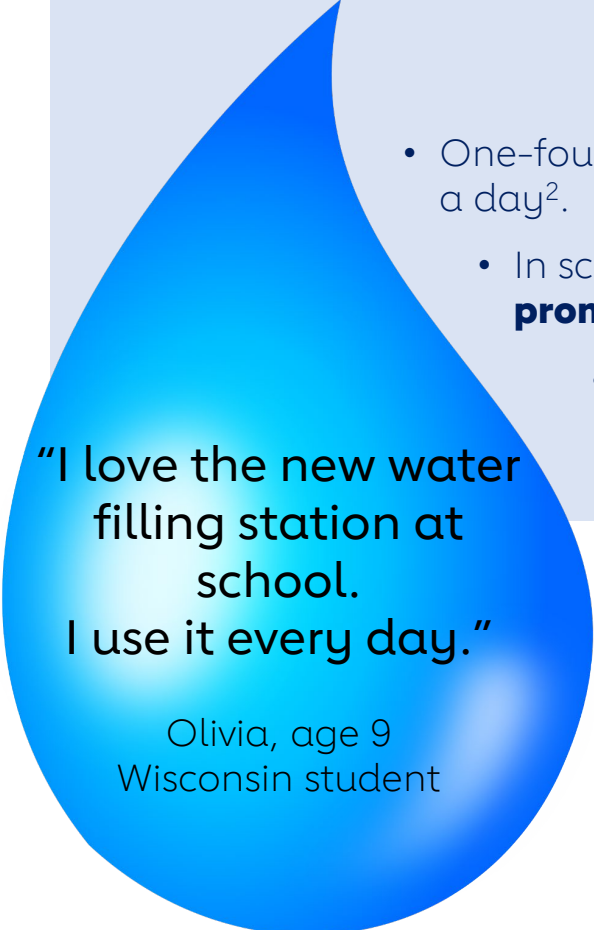
Why This Matters:

More than 13% of Wisconsin high schoolers are obese and an additional 15% are overweight⁷. This can lead to a lifetime of chronic health problems, including cardiovascular disease and stroke.

The American Heart Association advocates for increasing water consumption as a way to fight obesity and establish healthy eating habits earlier in life. Providing free, clean drinking water at school is a key way to encourage kids to drink more water. With water filling stations, students will be more willing to drink the filtered, cold water throughout their school day.

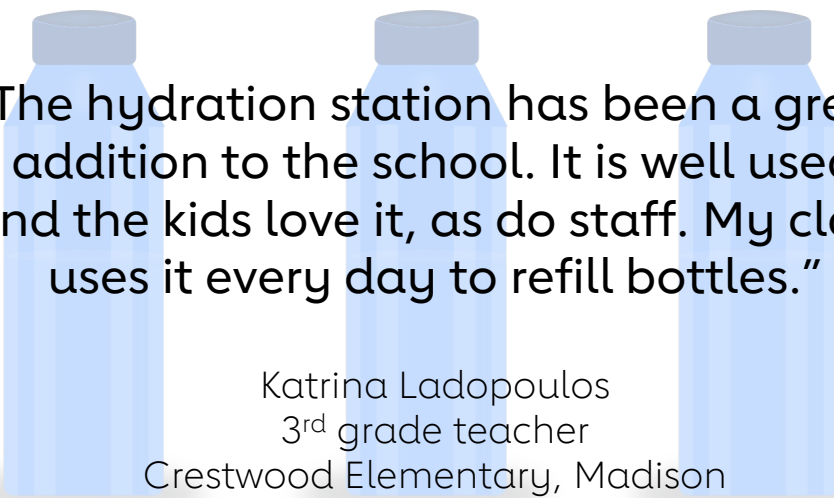
did you know:

- One-fourth of teens drink **less than one serving of water** a day².
- In schools where water is not only provided **but also promoted**, students drink more water⁸.
- Research shows replacing other beverages with water could cut up to **235 calories** from the average child's diet⁸.



"I love the new water filling station at school. I use it every day."

Olivia, age 9
Wisconsin student



"The hydration station has been a great addition to the school. It is well used and the kids love it, as do staff. My class uses it every day to refill bottles."

Katrina Ladopoulos
3rd grade teacher
Crestwood Elementary, Madison

references

1. Increasing Access to Safe Drinking Water in Schools and Communities, American Heart Association Policy Statement: page 1
2. Increasing Access to Safe Drinking Water in Schools and Communities, American Heart Association Policy Statement: page 2
3. Perceptions of Tap Water and School Water Fountains and Association With Intake of Plain Water and Sugar-Sweetened Beverages <https://onlinelibrary.wiley.com/doi/pdf/10.1111/josh.12138>
4. Centers for Disease Control and Prevention. Increasing Access to Drinking Water in Schools. Atlanta GA: US Dept. of Health and Human Services; 2014: pg. 17
5. Increasing Access to Safe Drinking Water in Schools and Communities, American Heart Association Policy Statement: page 3
6. Increasing Access to Safe Drinking Water in Schools and Communities, American Heart Association Policy Statement: page 1-2
7. *Nutrition, Physical Activity, and Obesity: Data, Trends and Maps* https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreByLocation&rdRequestForwarding=Form
8. Increasing Access to Safe Drinking Water in Schools and Communities, American Heart Association Policy Statement: page 4



Healthy Kids Collaborative



Wisconsin CHAPTER



marshfield children's hospital



TO: Wisconsin Plumbing Code Advisory Committee

DATE: June 23, 2021

RE: Water Filling Stations in Schools

Water plays an important role in maintaining a child’s overall health. Drinking water supports children’s muscles, joints, and tissues; improves their digestive system; and keeps their growing bodies hydrated. Drinking water can help people maintain a healthier weight, and children who drink fluoridated water instead of sugary drinks have a reduced risk of dental caries.

Unfortunately, many children don’t drink enough water. In 2009-2012, a national survey of children ages 6-19 found that more than half (54.5 percent) of U.S. children and adolescents were inadequately hydrated. Younger children are less likely to drink enough water compared to older children.

Studies have shown increased water consumption after the installation of water filling stations. A study of New York City public schools found students nearly tripled the amount of water they took after water dispensers were installed in the cafeteria, and they continued to choose water the following school year. Installing drinking water dispensers in schools was also associated with a decline in the likelihood of being overweight. A study of more than one million children in New York City public elementary and middle schools found that attending a school with water jets (i.e., drinking water dispensers) was associated with a significant decline in the likelihood of being overweight for boys (0.9 percent point reduction) and girls (0.6 percentage point reduction).

Additionally, during these unprecedented times, water bottle filling stations and personal water bottles may help reduce the spread of germs and disease. In one study, water fountains and manual pencil sharpener handles were determined to be the germiest surfaces in classrooms. Amid the COVID-19 pandemic, the CDC now encourages staff and students to bring their own water to minimize use and touching of water fountains.

The cost of a water filling station compared to a water fountain is nominal in the process of construction and can save dollars over time. Please put water within reach for our children. **Please update plumbing code to ensure all newly constructed schools and schools undergoing major renovations have water bottle filling stations.**

If you have any questions, please contact Nicole Hudzinski with the American Heart Association at nicole.hudzinski@heart.org or 608-225-4042.

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and title of person submitting the request: Erik Hansen, Consultant Building Systems on behalf of Justin Gavin, Section Chief Commercial Buildings		2) Date when request submitted: 9/28/2021 Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting	
3) Name of Board, Committee, Council, Sections: Commercial Building Code Council			
4) Meeting Date: 10/11/2021	5) Attachments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6) How should the item be titled on the agenda page? Recommendations and Proposed Changes to IMC/SPS 364, IECC/SPS 363 and IBC/SPS 362	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <i>(If yes, please complete Appearance Request for Non-DSPS Staff)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	9) Name of Case Advisor(s), if required:	
10) Describe the issue and action that should be addressed: Follow Up presentation of proposed changes to the 2021 International Plumbing/Mechanical/Energy Conservation Codes and associated Amendments relative to Service Water Requirements for consideration and vote – see attached spread sheet. Follow Up presentation of proposed changes to the 2021 International Mechanical Code Sections 364.0402, 364.0403 and 364.0505 for consideration and vote – see attached spread sheet. Proposed changes to the 2021 International Building Code and associated Amendments Chapters 1-8 and 10-14 for vote – see attached spread sheet (Note amendment to 362.0717 which changes 4 stories to 3 stories). Presentation of proposed changes to the 2021 International Building Code and associated Amendments Chapters 9 and 15-35 for consideration and vote – see attached spread sheet.			
11) Authorization			
Signature of person making this request Justin Gavin		Date	
Supervisor (if required)		Date	
Executive Director signature (indicates approval to add post agenda deadline item to agenda) Date			
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

Wisconsin Department of Safety and Professional Services

DRAFT – SUBJECT TO CHANGE

Recommendations and Proposed Changes to **IBC and SPS 362 (Chapters 1-35)**

Final Draft for Code Committee Meeting

October 11, 2021

DRAFT

2021 INTERNATIONAL BUILDING CODE – IBC (SPS 362)

CHAPTERS 1-35

NO.	IBC/SPS	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE/PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
	GENERAL	CLARIFICATION / CORRECTIONS	DIS	<ul style="list-style-type: none"> • ICC SUMMARIZES THE CHANGES TO THE 2021 EDITION AS “NUMEROUS CHANGES IN FORMAT TO PROVIDE CONSISTENT LANGUAGE THROUGHOUT THE CODES”. MANY OF THE REQUIREMENTS HAVE NOT CHANGED SIGNIFICANTLY BUT THE LOCATION WITHIN THE CODE HAS. • CORRECT USE OF “EXCEPTION”, “CONDITION” AND “ITEM” IN AMENDMENT AND CODE LANGUAGE AS APPROPRIATE. • CORRECT CODE SECTION REFERENCES AND TITLES AS APPLICABLE TO 2021 EDITION. • VERIFY/CORRECT OTHER TESTING AGENCIES, REFERENCED CODES AND CODE SECTIONS AS APPLICABLE. • UNDERLINE DISTINCT CHANGE IN CODE WORDING WHERE APPLICABLE. • CORRECT AWKWARD WORDING WHERE APPLICABLE. • MINOR CHANGES TO THE CODE LANGUAGE THAT DO NOT SIGNIFICANTLY IMPACT STAKEHOLDERS, ADD SIGNIFICANT COST TO PROJECTS PHYSICALLY OR PROCEDURALLY OR IMPACT DEPARTMENT REQUIREMENTS OR PROCESSES ARE DEEMED ACCEPTABLE. 	N/A	ERIK
	SEPTEMBER			<ul style="list-style-type: none"> • 		
	CHAPTER 1	UPDATE	ICC/DIS	SCOPE AND ADMINISTRATION <ul style="list-style-type: none"> • NO MAJOR CHANGES, NOTE THAT WISCONSIN EXCLUDES ALL OF CHAPTER 1. 	NONE	ERIK
	362.0100	UPDATE	DIS	362.0100 – ADMINISTRATION: RETAIN AMENDMENT AS WRITTEN. CONTAINS INSTRUCTIONAL INFO RELATIVE TO APPLICATION OF AMENDMENTS.	NONE	ERIK

	CHAPTER 2	CLARIFICATION	ICC/DIS	DEFINITIONS <ul style="list-style-type: none"> DEFINITIONS FOR ATRIUM, CHANGE OF OCCUPANCY, IMPACT PROTECTION SYSTEMS, *MASS TIMBER, NAILABLE SUBSTRATE, PENTHOUSE, PUZZLE ROOM AND STRUCTURAL MEMBERS ADDED. 	MINIMAL	ERIK
71, 96	362.0202	<i>CHANGE/</i> CLARIFICATION	DIS	362.0202 – DEFINITIONS: RETAIN AMENDMENT AS WRITTEN BUT <i>REVISE DEFINITION OF “COMMERCIAL MOTOR VEHICLE” TO MORE CLEARLY STATE REQUIREMENTS AND NOTE THE DIFFERENCE BETWEEN “COMMERCIAL MOTOR VEHICLE” AND “MOTOR VEHICLE” USED IN THE IMC AND PROVIDE EXAMPLES (FIRE FIGHTING APPARATUS)</i> MAINTAINS CONSISTENT TERMINOLOGY AND BETTER CLARIFIES THE INTENT. <i>REVISE DEFINITION OF “PROPERTY LINE” TO INCLUDE LEGAL LAND PARCEL SEPARATION OR PERMANENT RECOGNIZED EASEMENT.</i> <i>CREATE DEFINITION FOR “TOILET ROOM” WHICH STIPULATES THAT THERE MUST BE A WATER CLOSET AND A LAVATORY IN A SINGLE SPACE THAT PROVIDES PRIVACY FOR THE INDIVIDUAL WHO IS USING IT.</i>	NONE	ERIK
	CHAPTER 3	CLARIFICATION	ICC/DIS	OCCUPANCY CLASSIFICATION AND USE <ul style="list-style-type: none"> CHANGES MADE TO MORE APPROPRIATELY ADDRESS ALCOHOLIC BEVERAGE STORAGE FOR HAZARDOUS/NON-HAZARDOUS OCCUPANCIES AND CLEAR DELINEATION FOR ABOVE AND BELOW 16% ALCOHOL CONTENT WITHOUT REFERENCE TO CONTAINER TYPE. 	MINIMAL	ERIK
	362.0306	UPDATE	DIS	362.0306 – CHEESE FACTORIES CLASSIFIED AS F-2 OCCUPANCY: RETAIN AMENDMENT AS WRITTEN. IDENTIFIES SPECIFIC DEPARTMENT INTERPRETATION.	NONE	ERIK
	362.0307	UPDATE	DIS	362.0307 – PYROPHORIC MATERIALS: RETAIN AMENDMENT AS WRITTEN. PROVIDES REFERENCE TO SPS 314 – FIRE PREVENTION.	NONE	ERIK

	362.0308	UPDATE	DIS	362.0308 – CLASSIFICATION OF INSTITUTIONS WITH 5 OR FEWER PERSONS RECEIVING MEDICAL CARE: RETAIN AMENDMENT AS WRITTEN. IDENTIFIES SPECIFIC DEPARTMENT INTERPRETATION.	NONE	ERIK
	362.0310	UPDATE	DIS	362.0310 – USE AND OCCUPANCY CLASSIFICATION: RETAIN AMENDMENT AS WRITTEN. IDENTIFIES SPECIFIC DEPARTMENT INTERPRETATION AND DEFINITIONS.	NONE	ERIK
	CHAPTER 4	ADDITIONS	ICC/DIS	SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE <ul style="list-style-type: none"> • <u>*WATER SUPPLY TO FIRE PUMPS FOR BUILDINGS OF MASS TIMBER CONSTRUCTION HIGHER THAN 120’.</u> • ADDITIONAL PROVISIONS FOR ATRIUMS • FLOOR SURFACES IN PARKING GARAGES • ADDITIONAL PROVISIONS FOR I-2 OCCUPANCIES • REQUIREMENTS FOR PUZZLE ROOMS • FIRE WALL USE IN CONTROL AREAS • PROVISIONS FOR COOKING IN AMBULATORY CARE FACILITIES • EXPANDED REQUIREMENTS FOR PLAY STRUCTURES. 	SIGNIFICANT	ERIK
	362.0400	UPDATE	DIS	362.0400 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY: RETAIN AMENDMENT AS WRITTEN. ADDITIONAL REQUIREMENTS/CONCERNS REGARDING SPECIFIC OCCUPANCIES OR USES NOT ADDRESSED IN 2021 CODE.	NONE	ERIK
	362.0401	UPDATE	DIS	362.0401 – CHAPTER ATCP 93 COMPLIANCE: RETAIN AMENDMENT AS WRITTEN. ADDITIONAL REQUIREMENT/CONCERNS REGARDING MOTOR FUEL DISPENSING FACILITIES AND REPAIR GARAGES COMPLYING WITH ATCP 93 NOT ADDRESSED IN 2021 CODE.	NONE	ERIK
35	<i>362.0406</i>	<i>CHANGE</i>	DIS	<i>362.0406 – FLOOR SURFACES IN MOTOR VEHICLE RELATED OCCUPANCIES: ADD LANGUAGE THAT PROHIBITS THE USE OF UNSURFACED GRAVEL OR OTHER SIMILAR ABSORBENT PAVING MATERIALS AS A FLOOR SURFACE IN THESE OCCUPANCIES.</i>	MINIMAL	ERIK

	362.0412	CHANGE	DIS	<p>362.0412 – AIRCRAFT STORAGE: EDIT AMENDMENT TO PROVIDE CLARIFICATION. <i>MODIFY REFERENCE TO SPS 382 (PLUMBING CODE) TO ADDRESS COMPLIANCE WITH DRAIN REQUIREMENTS.</i></p> <p><i>ADD REFERENCE TO FLOOR SURFACE REQUIREMENTS IN 406.2.4.</i></p>	MINIMAL	ERIK
	362.0415	UPDATE	DIS	<p>362.0415 – HAZARDOUS MATERIALS: RETAIN AMENDMENT AS WRITTEN. ADDITIONAL REQUIREMENT/CONCERNS REGARDING MAGAZINES FOR DETONATORS NOT ADDRESSED IN 2021 CODE.</p>	NONE	ERIK
184	362.0420	CHANGE	DIS	<p>362.0420 – SEPARATION WALLS: ADD LANGUAGE TO DESCRIBE REQUIREMENTS FOR SEPARATION BETWEEN SINGLE TENANT R OCCUPANCY COVERED UNDER THE WISCONSIN UDC FROM OTHER COMMERCIAL TENANTS.</p>	NONE	ERIK
	362.0423	UPDATE	DIS	<p>362.0423 – STORM SHELTERS: RETAIN AMENDMENT AS WRITTEN. CODE LANGUAGE REQUIRES STORM SHELTERS FOR EMERGENCY SERVICES AND SCHOOLS OR ICC 500 SHELTER DESIGN COMPLIANT CONSTRUCTION WHICH PLACES AN UNNECESSARY BURDEN ON MUNICIPALITIES.</p>	NONE	ERIK
165	CHAPTER 5	ADDITIONS/ CHANGES	ICC/DIS	<p>GENERAL BUILDING HEIGHTS AND AREAS</p> <ul style="list-style-type: none"> • OCCUPIED ROOF PROVISIONS • <u>*BUILDING HEIGHTS, NUMBER OF STORIES AND AREA TO ADDRESS MASS TIMBER CONSTRUCTION</u> • FRONTAGE INCREASE SIMPLIFIED • SEPARATED OCCUPANCIES TABLE “COMPLETED” • <u>*FIRE SEPARATION/THERMAL BARRIER OF MASS TIMBER CONSTRUCTION ADDRESSED</u> • LIVE/WORK UNITS RELOCATED TO SECTION 508 W/O CHANGE TO TECHNICAL REQUIREMENTS • STATIONARY STORAGE BATTERY SYSTEMS MOVED FROM 509.1 INCIDENTAL USES TO IFC 1207 • PROVISIONS FOR STAIRWAY CONSTRUCTION IN PEDESTAL BUILDINGS. 	MINIMAL	ERIK

362.0504	UPDATE	DIS	362.0504 – BUILDING HEIGHT AND NUMBER OF STORIES: RETAIN AMENDMENT AS WRITTEN. EXEMPTS TEMPORARY OR PERMANENT USE OF FARM PREMISE BUILDINGS FOR A-2 OCCUPANCIES.	NONE	ERIK
362.0506	<i>CHANGE</i>	DIS	362.0506 – ALLOWABLE BUILDING AREA: <i>DELETE AMENDMENT – AREA MISTAKE CORRECTED IN 2021 TABLE.</i>	NONE	ERIK
362.0509	UPDATE	DIS	362.0509 – INCINERATOR ROOMS: RETAIN AMENDMENT AS WRITTEN. IDENTIFIES CREMATORIUMS SEPARATE FROM INCINERATOR ROOMS.	NONE	ERIK
CHAPTER 6	CHANGES	ICC/DIS	TYPES OF CONSTRUCTION <ul style="list-style-type: none"> <i>*PROVISIONS FOR MASS TIMBER CONSTRUCTION ADDED</i> EXPANDED USE OF WOOD AND FRTW IN TYPE I AND II CONSTRUCTION. 	SIGNIFICANT	ERIK
362.0603	UPDATE	DIS	362.0603 – ALLOWABLE MATERIALS: RETAIN AMENDMENT AS WRITTEN. ALLOWS CERTAIN TESTED AND APPROVED FIRE RESISTANT COATINGS.	MINIMAL	ERIK

	CHAPTER 7	CHANGES/ ADDITIONS	ICC/DIS	FIRE AND SMOKE PROTECTION FEATURES <ul style="list-style-type: none"> • *PROVISIONS FOR MASS TIMBER • FIREPROOFING AT SECONDARY STEEL ATTACHMENT. • RELOCATION OF EXTERIOR WALL RATING REQUIREMENTS. • PROVISIONS FOR ENERGY STORAGE SYSTEMS. • CONTINUITY OPTION FOR FIRE BARRIERS. • CHANGES TO FIRE PARTITION SUPPORTING CONSTRUCTION. • SMOKE COMPARTMENT CONTINUITY INTENT AND PERMITTED OPENINGS CLARIFIED. • TOP OF RATED SHAFT ENCLOSURES CLARIFIED. • JOINT AND VOID PROTECTION REFORMATTED. • PROHIBITED USE OF TERMINATED (HOSPITAL) DOOR STOPS IN RATED ASSEMBLIES. • PERFORMANCE REQUIREMENTS FOR RATED CURTAIN ASSEMBLIES. • PROVISIONS FOR DOORS IN DOUBLE FIRE WALLS. • PROVISIONS FOR STATIC AND DYNAMIC CEILING RADIATION DAMPERS. • FIRE DAMPER ACCESS AND MINIMUM SIZE REQUIREMENT. • PERMITTED USE OF FLEXIBLE CONNECTIONS AT FULLY DUCTED HVAC SYSTEMS. • *MASS TIMBER PRESCRIPTIVE FIRE RESISTANCE PROVISIONS. 	SIGNIFICANT	ERIK
	362.0702	UPDATE	DIS	362.0702 - DEFINITIONS: RETAIN AMENDMENT AS WRITTEN. SUBSTITUTES DEFINITION FOR “FIRE SEPARATION DISTANCE”.	NONE	ERIK
	362.0705	UPDATE	DIS	362.0705 – EXTERIOR WALLS: RETAIN AMENDMENT AS WRITTEN. EXPANDS AND SIMPLIFIES PROJECTION DISTANCES.	NONE	ERIK
18, 74	362.0706	CHANGE	DIS	362.0706 – FIRE WALL IDENTIFICATION: <i>EDIT AMENDMENT TO INCLUDE FIRE RATING (IN HOURS) TO SIGNAGE REQUIREMENTS AT EXTERIOR OF BUILDING.</i> <i>ADD EXCEPTION FOR EXTENDING FIRE WALL 4’ IN ONE DIRECTION AT PARTY WALLS TO FORMALIZE DEPARTMENT INTERPRETATION.</i>	MINIMAL	ERIK
184	362.0708	CHANGE	DIS	362.0708 – SEPARATION WALLS: <i>ADD LANGUAGE TO DESCRIBE REQUIREMENTS FOR SEPARATION BETWEEN SINGLE TENANT R OCCUPANCY COVERED UNDER THE WISCONSIN UDC FROM OTHER COMMERCIAL TENANTS.</i>	NONE	ERIK

362.0713	UPDATE	DIS	362.0713 – CHUTE DISCHARGE ROOM: RETAIN AMENDMENT AS WRITTEN. APPLIES REQUIREMENTS TO RECYCLING CHUTES.	NONE	ERIK
362.0717	UPDATE/ <i>CHANGE</i>	DIS	362.0717 – DUCTS AND AIR TRANSFER OPENINGS: RETAIN AMENDMENT AS WRITTEN. PROVIDES ADDITIONAL METHOD FOR SMOKE DAMPER ACTUATION AND EXEMPTS SMOKE DAMPERS IN LABORATORY VENTILATING SYSTEMS IF DESIGNED AND INSTALLED PER NFPA 45. <i>ADD EXCEPTION TO 362.0717.6.3 THAT PERMITS DUCTS CONTAINED WITHIN INDIVIDUAL DWELLING UNITS TO CONNECT UP TO 3 STORIES WITHOUT BEING ENCLOSED IN RATED CONSTRUCTION AND NOT REQUIRE FIRE DAMPERS.</i>	MINIMAL	ERIK
362.0722	UPDATE	DIS	362.0722– FIRE RESISTANT RATINGS: RETAIN AMENDMENT AS WRITTEN. CLARIFIES REQUIREMENTS FOR EXTERIOR WALLS WHERE SEPARATION DISTANCE IS GREATER THAN 10’.	NONE	ERIK
CHAPTER 8	ADDITION	ICC/DIS	INTERIOR FINISHES <ul style="list-style-type: none"> MOVES COMBUSTIBLE LOCKERS FROM IFC TO IBC AND TREATS AS A FINISH REQUIREMENT. 	MINIMAL	ERIK

	CHAPTER 9	ADDITIONS/ MODIFICATION	<p>FIRE PROTECTION SYSTEMS -</p> <ul style="list-style-type: none"> • SPRINKLER REQUIREMENTS FOR UPHOLSTERED FURNITURE AND MATTRESSES CLARIFIED. • ADDED SPRINKLER PROTECTION IN E OCCUPANCIES FOR FIRE AREAS LOCATED ON FLOORS OTHER THAN LEVEL OF EXIT DISCHARGE AND OCCUPANT LOAD OF 300 OR MORE. • SPRINKLER REQUIREMENT ADDRESSED FOR STORAGE OF DISTILLED SPIRITS AND WINE. • REQUIRED SPRINKLERS IN OPEN PARKING GARAGES GREATER THAN 48,000 SF AND MECHANICAL ACCESS PARKING GARAGES. • RESTRICTED PODIUM BUILDING HEIGHT WHEN USING NFPA 13R SYSTEM. • CLARIFICATION ON THE APPLICATION OF NFPA 13R FOR CORRIDORS AND EXTERIOR BALCONIES THAT ARE A PART OF A MEANS OF EGRESS EVEN IF EXEMPTED BY NFPA 13R STANDARD. • NFPA 13R PROTECTING ALL R OCCUPANCIES ATTICS EXCEEDING A CERTAIN OCCUPANCY, USE OR HEIGHT OF THE ATTIC SPACE(S) ADDED. • WATER SUPPLY OPTIONS FOR STANDPIPE SYSTEMS IN OPEN PARKING GARAGES. • MANUAL FIRE ALARM PROVISIONS ADDED TO ASSEMBLY OCCUPANCIES WITH OVER 100 PERSONS ABOVE/BELOW LOWEST LEVEL OF EXIT DISCHARGE. • REMOVED BUILDING FIRE ALARM SYSTEM REQUIREMENTS FOR R-4 OCCUPANCIES – REVISED THIS SECTION TO INCLUDE BUILDING MANUAL FIRE ALARM SYSTEMS FOR S OCCUPANCY PUBLIC AND SELF-STORAGE BUILDINGS THREE STORIES OR GREATER. VISIBLE NOTIFICATION IN COMMON AREAS / CORRIDORS. AUDIBLE NOTIFICATION THROUGHOUT (INCLUDES INDIVIDUAL STORAGE UNITS). • MULTI-CHANNEL EMERGENCY / VOICE ALARM COMMUNICATION (EVAC) FIRE ALARM SYSTEM FOR OCCUPIED FLOORS OVER 120 FEET ABOVE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS ADDED. • LOW FREQUENCY REQUIREMENT FOR OCCUPANT NOTIFICATION DEVICES IN SLEEPING ROOMS OF R-1 AND R-2 OCCUPANCIES. 	SIGNIFICANT	ERIK
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				<ul style="list-style-type: none"> • ALTERNATIVE METHOD OF PRESSURIZING SMOKE PROOF STAIR ENCLOSURE/VESTIBULES. • ADDED REQUIREMENT FOR SMOKE AND HEAT VENTS TO BE OPERATED BY MANUAL AND AUTOMATIC MEANS. • FIRE COMMAND CENTERS REQUIRED IN VERY LARGE F-1 AND S-1 OCCUPANCIES. • REQUIREMENT FOR MASS NOTIFICATION SYSTEMS ON COLLEGE CAMPUSES WITH A CUMULATIVE OCCUPANT LOAD OF 1,000 OR MORE AND NEW BUILDINGS BEING CONSTRUCTED IF REQUIRED VIA RISK ANALYSIS PER NFPA 72. 		
362.0901	UPDATE	DIS	362.0901– FIRE PROTECTION SYSTEMS: RETAIN AMENDMENT AS WRITTEN. PROVIDES ADDITIONAL PROCEDURAL REQUIREMENTS AND SPECIFIES FIRE HOSE THREAD REQUIREMENTS.	NONE	ERIK	
362.0902	UPDATE/ MODIFY	DIS	362.0902– DEFINITIONS: RETAIN AMENDMENT AS WRITTEN. PROVIDES CLARIFICATION ON SPRINKLER SYSTEMS AND FIRE AREAS. <i>ADD DEFINITION OF “OPEN FLAME” AND “ACCESS TO MUNICIPAL WATER” TO PROVIDE CLARITY RELATIVE TO 362.0903(18).</i>	NONE	ERIK	

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362.0903		CHANGE/ ADD	<p>DIS</p> <p>362.0903– AUTOMATIC FIRE SPRINKLER SYSTEMS: RETAIN AMENDMENT AS WRITTEN WITH THE FOLLOWING EXCEPTIONS:</p> <p><i>REVISE WORDING OF (1), (2), (3) AND (4) - CLARIFICATION RELATIVE TO THE MEANING OF “THE LOWEST LEVEL OF EXIT DISCHARGE” AND “STORY” IN LIEU OF “THROUGHOUT THE BUILDING” AND ADD PROVISION FOR 300 OCCUPANTS AS A LIMIT FOR EDUCATION OCCUPANCIES.</i></p> <p><i>REVISE (5) - ALLOW ENFORCEMENT OF IBC 903.2.8.1 THRU 903.2.8.3, REVISE (B) TO 4 UNITS, REMOVE (CM), ADD SECTION THAT ADDRESSES TOWNHOUSES WITH PROPER SEPARATION TO ALLOW NFPA 13D SYSTEM.</i></p> <p>RETAIN (6) AS WRITTEN – ADDRESSES STUDENT HOUSING.</p> <p><i>REVISE (7) - REMOVE EXCEPTIONS FOR CONTROL TOWERS, OPEN PARKING STRUCTURES, TELECOMMUNICATIONS EQUIPMENT SPACES, AND SPECIAL INDUSTRIAL BUILDINGS.</i> RETAIN EXCEPTION FOR F-2 OCCUPANCIES.</p> <p>RETAIN (8) – SPRINKLER SYSTEMS UNDESIRABLE DUE TO CONTENTS.</p> <p><i>REVISE (9) – INCLUDE REFERENCE TO APPLICABLE EXCEPTIONS.</i></p> <p><i>REVISE (10) – ALLOW TOWNHOUSES WITH PROPER SEPARATION.</i></p> <p>RETAIN (B)1 AND (B)2 AS WRITTEN.</p> <p>RETAIN (11) AS WRITTEN – REQUIREMENTS FOR TESTING AND MAINTENANCE.</p> <p><i>DELETE (12) – STORAGE OF MATTRESSES AND UPHOLSTERED FURNITURE.</i></p> <p>RETAIN (13) – RECYCLING CHUTES.</p> <p>RETAIN (14) – FM GLOBAL REFERENCE.</p> <p>RETAIN (15) – FAIRGROUNDS BUILDINGS PER STATE STATUTE.</p> <p><i>DELETE (16) – A OCCUPANCIES ON ROOF NO LONGER EXEMPTED.</i></p>	SIGNIFICANT	BOB
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362.0904	REVISE/ <i>CHANGE</i> / UPDATE	DIS	<p>362.0904– ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEMS: RETAIN (1) AND (2), PROVIDES INSTRUCTION AND CLARIFICATION FOR MANUAL – WET SPRINKLER SYSTEMS.</p> <p><i>REVISE (3) – APPLIES TO 24 HOUR CARE FACILITIES WHICH ARE UNDER DHS – VERIFY. 2021 WORDING APPEARS TO ADDRESS OTHER DSPTS APPLICABLE CONDITIONS.</i></p>	<i>MINIMAL</i>	BOB	

362.0907	UPDATE/ <i>REVISE</i>	DIS	362.0907– FIRE ALARM AND DETECTION SYSTEMS: RETAIN AMENDMENT AS WRITTEN. PROVIDES ADDITIONAL GUIDANCE AND APPLICATIONS. <i>ADDRESS PROTECTIVE COVERS ADDED TEXT WHICH WILL CHANGE AMENDMENT WORDING.</i>	NONE	BOB
362.0909	UPDATE	DIS	362.0909– SMOKE CONTROL SYSTEMS: RETAIN AMENDMENT AS WRITTEN. PROVIDES ADDITIONAL REQUIREMENTS FOR INSPECTION AND TESTING, 2021 VERSION DOES NOT ADDRESS.	NONE	BOB
<i>362.0912</i>	<i>ADD</i>	DIS	<i>AMEND 912 TO REFERENCE “FIRE CHIEF” IN LIEU OF “FIRE CODE OFFICIAL” OR CREATE GLOBAL DEFINITION IN 202 IF APPROPRIATE.</i>	<i>MINOR</i>	BOB
<i>362.0913</i>	<i>ADD</i>	DIS	<i>ADD NOTE TO 913.4 TO INCLUDE FIRE PUMPS SUPPLYING AUTOMATIC FIRE SPRINKLER SYSTEMS AND/OR STANDPIPE SYSTEMS TO BE MONITORED PER IBC 903.4.</i>	<i>MINOR</i>	BOB
362.0915	<i>CHANGE</i>	DIS	362.0915– CARBON MONOXIDE DETECTION: <i>REVISE TO REFLECT REQUIREMENTS IN STATUTE 101.149, (NOTE THIS EFFECTS 366.0600).</i>	<i>SIGNIFICANT</i>	BOB

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CHAPTER 10	MODIFICATION / CLARIFICATION	ICC/DIS	<p>MEANS OF EGRESS</p> <ul style="list-style-type: none"> • COMMON PATH OF TRAVEL LIMIT ELIMINATED FOR UNOCCUPIED MECHANICAL SPACES. • SPECIFICS OF EGRESS FROM OCCUPIED ROOFS AND STORIES WITH A SINGLE EXIT ADDRESSED. • INCREASE IN STAIRWAY ILLUMINATION LEVELS. • ELEVATORS SERVING OCCUPIED ROOFS ABOVE THIRD FLOOR TO SERVE AS ACCESSIBLE MEANS OF EGRESS (AMOE). • INTERIOR AREA OF REFUGE IN LIEU OF EXTERIOR AREA OF ASSISTED RESCUE PERMITTED. • MINIMUM SIZE OF AREA OF RESCUE INCREASED TO MATCH 2017 A117.1. • DOOR SIZE REGULATIONS CHANGED. • ADDITIONAL DOOR COMPONENTS PERMITTED TO PROJECT INTO OPENING HEIGHT. • DOOR OPENING FORCE COORDINATED WITH 2017 A117.1. • DOOR LOCKS AND LATCHES USE EXPANDED. • STAIR LANDING MINIMUM WIDTH CLARIFIED. • EGRESS THRU ELEVATOR LOBBIES PERMITTED FOR SINGLE EXIT SPACES. • REQUIREMENTS FOR EXIT ACCESS STAIRWAYS SERVING TWO STORIES CLARIFIED. • DEAD END CORRIDORS NOT SERVING PATIENT OR TREATMENT ROOMS EXTENDED TO 30'. • PROVISIONS FOR HANDRAILS AT "SOCIAL STAIRS" INCLUDED. • EMERGENCY ESCAPE AND RESCUE OPENINGS COORDINATED BETWEEN IBC AND IRC. 	MINIMAL	ERIK
362.1004	<i>CHANGE</i>	DIS	362.1004– EGRESS FOR OUTDOOR AREAS: <i>DELETE AMENDMENT, PREVIOUS CONCERNS ARE ADDRESSED IN 2021 SECTION 1004.7.</i>	NONE	ERIK
362.1006	UPDATE	DIS	362.1006– EXITS: RETAIN AMENDMENT. PROVIDES ADDITIONAL REQUIREMENTS NOT ADDRESSED IN THE 2021 IBC.	NONE	ERIK

33	362.1009	UPDATE/ CHANGE	DIS	<p>362.1009– ACCESSIBLE MEANS OF EGRESS: RETAIN AMENDMENT AS WRITTEN. PROVIDES CLARIFICATION FOR EXEMPTING AREAS OF REFUGE WHERE ACCESS TO FLOOR IS NOT REQUIRED.</p> <p><i>ADD REQUIREMENT FOR DESIGN OF TWO WAY COMMUNICATION SYSTEM TO BE PER NFPA 72.</i></p>	NONE	BOB
	362.1010	CHANGE	DIS	<p>362.1010– DOORS, GATES AND TURNSTILES: <i>DELETE AMENDMENT, PREVIOUS CONCERNS ARE ADDRESSED IN 2021 SECTION 1010.1.1 EXCEPTION 11, 1010.1.7 AND 1010.2.9.2. CONFIRMED AS PARALLEL WITH ELECTRICAL CODE.</i></p>	NONE	ERIK
	362.1011	CHANGE	DIS	<p>362.1011– STAIRWAY WIDTH: RETAIN (1) – PROVIDES CLARIFICATION FOR THE INSTALLATION OF STAIRWAY CHAIRLIFTS.</p> <p><i>DELETE (2) – STAIR SHAFT CONSTRUCTION IN PEDESTAL BUILDINGS IS ADDRESSED IN 2021 IBC.</i></p>	NONE	ERIK
	362.1013	CHANGE	DIS	<p>362.1013– FLOOR LEVEL EXIT SIGNS: <i>DELETE AMENDMENT WHICH REMOVES REQUIREMENT FOR FLOOR LEVEL EXIT SIGNS.</i></p>	NONE	ERIK
	362.1015	UPDATE	DIS	<p>362.1015– GUARDS: RETAIN AMENDMENT – PROVIDES ADDITIONAL CLARIFICATION FOR LOCATION, APPLICATION AND USE OF GUARDS.</p>	NONE	ERIK
28	362.1016	CREATE	DIS	<p>362.1016 – EGRESS THRU INTERVENING SPACES: <i>ADD “TOILET ROOMS” TO ITEM 5.</i></p>		
	362.1020	UPDATE	DIS	<p>362.1020– CORRIDOR CONTINUITY: RETAIN AMENDMENT – PROVIDES ADDITIONAL CLARIFICATION FOR APPLICATION OF INTERVENING ROOMS.</p>	NONE	ERIK
	362.1029	CHANGE	DIS	<p>362.1029– SPACES UNDER BLEACHERS AND GRANDSTANDS: <i>REVISE AMENDMENT TO CLARIFY THAT DELETION APPLIES ONLY TO OUTDOOR GRANDSTANDS AND BLEACHERS.</i></p>	MINIMAL	ERIK

CHAPTER 11	ADDITION/ UPDATE/ MODIFICATION	ICC/DIS	<p>ACCESSIBILITY</p> <ul style="list-style-type: none"> • A117.1 – 2017 ADOPTED WHICH PRIMARILY ENHANCES THE CLEAR FLOOR SPACE AND MANEUVERING CLEARANCES FOR NEW CONSTRUCTION. • 3,000 SF EXCLUSION PROHIBITED IF 4 OR MORE DWELLING UNITS TO ALIGN WITH FAIR HOUSING ACT. • AUTO DOOR OPENERS REQUIRED AT PUBLIC ENTRANCES FOR SPECIFIC OCCUPANCIES. • ACCESSIBLE ELECTRIC VEHICLE CHARGING STATIONS IF/WHERE PROVIDED. • ASSISTED TOILET AND BATHING DESIGN OPTIONS (IN IBC, NOT A117.1). • REQUIREMENT FOR ACCESSIBLE BOTTLE FILLING STATIONS IF/WHERE PROVIDED. • ACCESSIBILITY REQUIREMENTS FOR SERVICE WINDOWS • DELETION OF REDUNDANT REQUIREMENTS FOR OPERABLE PARTS IN IBC. 	SIGNIFICANT	ERIK
362.1101	UPDATE	DIS	362.1101– DESIGN OF TYPE A AND B UNITS: RETAIN AMENDMENT – PROVIDES CLARIFICATION FOR CIRCUIT BREAKER INSTALLATION AND PROVISIONS FOR RENTER REQUEST FOR CONTROL ACCOMMODATIONS.	NONE	ERIK
362.1103	UPDATE	DIS	362.1103– SCOPING REQUIREMENTS – LIMITED ACCESS SPACES: RETAIN AMENDMENT – PROVIDES CLARIFICATION FOR SPECIFIC SPACES AND AREAS NOT REQUIRED TO BE ACCESSIBLE.	NONE	ERIK
362.1104	<i>CHANGE</i>	DIS	362.1104– ACCESSIBLE ROUTE: RETAIN AMENDMENT – DISTINGUISHES GOVERNMENT OWNED OR OPERATED FACILITIES. <i>REWORD FOR CLARITY, APPLIES ONLY TO PRESS BOXES.</i>	NONE	ERIK
362.1107	UPDATE	DIS	362.1107– DWELLING UNITS AND SLEEPING UNITS: RETAIN AMENDMENT. PROVIDES CLARIFICATION FOR THE INCLUSION OF TYPE B UNITS FOR SPECIFIC OCCUPANCIES.	NONE	ERIK
362.1111	UPDATE	DIS	362.1111– SIGNAGE: RETAIN AMENDMENT – PROVIDES ADDITIONAL REQUIREMENTS FOR PARKING SIGNAGE.	NONE	ERIK

	CHAPTER 12	ADDITION/ MODIFICATION	ICC/DIS	INTERIOR ENVIRONMENT <ul style="list-style-type: none"> • UNVENTED ATTIC ALTERNATIVE DESIGN PERMITTED. • ADDITIONAL CLASSROOM ACOUSTIC REQUIREMENTS. • 190 SF (INCREASED FROM 120 SF) EFFICIENCY DWELLING UNIT MINIMUM. • SCREENING REQUIREMENTS AT RESTROOM ENTRIES. 	MINIMAL	ERIK
362.1203		UPDATE	DIS	362.1203– NATURAL VENTILATION: RETAIN AMENDMENT – PROVIDES ADDITIONAL DESIGN OPTIONS.	NONE	ERIK
362.1204		UPDATE/	DIS	362.1204– INTERIOR ENVIRONMENT: RETAIN AMENDMENT – REQUIRES COMPLIANCE WITH IMC.	NONE	ERIK
362.1206		<i>CHANGE</i>	DIS	362.1206– COURTS: <i>DELETE AMENDMENT – OPTION TO DRAIN VIA APPROVED METHOD OTHER THAN PUBLIC UTILITY IS PROVIDED FOR IN 2021 IBC.</i>	NONE	ERIK
362.1210		UPDATE	DIS	362.1210– TOILET ROOMS: RETAIN AMENDMENT AS WRITTEN, PROVIDING DEFINITION FOR TOILET ROOM CORRECTS PREVIOUS ISSUE.	NONE	ERIK
	CHAPTER 13	N/A	ICC/DIS	ENERGY EFFICIENCY <ul style="list-style-type: none"> • THIS CODE SECTION DEFERS TO THE IECC. 	N/A	ERIK
	CHAPTER 14	ADDITION/ MODIFICATION	ICC/DIS	EXTERIOR WALLS <ul style="list-style-type: none"> • VAPOR RETARDERS CLARIFIED AND LINKED TO CLIMATE ZONE REQUIREMENTS. • DOUBLE VAPOR BARRIERS REQUIRE SPECIAL APPROVAL. • CLARIFICATION ON THE USE OF CLASS II AND CLASS III VAPOR RETARDERS. • SIMPLIFIED REQUIREMENTS FOR THE USE OF METAL COMPOSITE MATERIALS ON BUILDING EXTERIORS. 	MINIMAL	ERIK

362.1405	<i>CHANGE</i>	DIS	<p>362.1405– EXTERIOR WALLS: <i>DELETE (1M) AND (2M) WHICH ARE ADDRESSED IN THE 2021 IBC.</i></p> <p>RETAIN (3M) WHICH PROVIDES REQUIREMENTS IN ADDITION TO THOSE IN THE 2021 IBC FOR USE OF FOAM SHEATHING UNDER VINYL SIDING.</p>	NONE	ERIK
OCTOBER					
CHAPTER 15	ADDITION/ MODIFICATION	ICC/DIS	<p>ROOF ASSEMBLIES AND ROOFTOP STRUCTURES</p> <ul style="list-style-type: none"> • MOISTURE RESISTANCE REQUIREMENTS FOR NON-FIRE RATED PARAPETS. • COMPLIANCE REQUIREMENTS SHIFTED TO ANSI SPRI RP-4 (WIND SPEED/SCOURING). • PARAPET REQUIREMENT FOR AGGREGATE ROOFS WIND SPEED/BLOW-OFF. 	MINIMAL	ERIK
362.1503	UPDATE	DIS	<p>362.1503 – SECONDARY ROOF DRAINAGE: RETAIN AMENDMENT AS WRITTEN, INCORPORATES REQUIREMENTS FOR COMPLIANCE WITH SPS 382 (WISCONSIN PLUMBING CODE).</p>	NONE	ERIK
362.1505	UPDATE	DIS	<p>362.1505 – ROOF COVERING CLASSIFICATION: RETAIN AMENDMENT AS WRITTEN, REMOVES REQUIREMENT TO COMPLY WITH THE IW-UIC.</p>	NONE	ERIK
362.1506	<i>CHANGE</i>	DIS	<p>362.1506 – ROOF COVERING MATERIALS: <i>DELETE AMENDMENT, 2021 VERSION ADDRESSES PREVIOUS CONCERN.</i></p>	NONE	ERIK
362.1507	<i>CHANGE</i>	DIS	<p>362.1507– ROOF SLOPE: <i>DELETE AMENDMENT, 2021 VERSION ADDRESSES PREVIOUS CONCERN.</i></p>	NONE	ERIK

CHAPTER 16	ADDITION/ MODIFICATION	ICC/DIS	STRUCTURAL DESIGN <ul style="list-style-type: none"> • REQUIREMENT FOR WIND ZONES TO BE IDENTIFIED IN THE CONSTRUCTION DOCUMENTS FOR COMPONENTS AND CLADDING. • LARGE ASSEMBLY SPACES CHANGED TO RISK CATEGORY III. • LOAD COMBINATION REQUIREMENTS DIRECTED TO ASCE 7. • CLARIFICATION OF DEAD LOAD REQUIREMENTS FOR ROOFS. • CHANGE TO REQUIREMENTS FOR FALL ARREST AND LIFELINE TO ALIGN WITH OSHA REGULATIONS. • LIVE LOAD REQUIREMENTS FOR SHIPS LADDERS ADDED AND COORDINATED WITH ASCE 7. • CHANGE TO SNOW LOAD MAPS FOR WESTERN UNITED STATES AND NEW HAMPSHIRE. • SOIL UPLIFT LOAD REQUIREMENT ADDED. • SECONDARY ROOF DRAINAGE SYSTEM RAIN LOADS ADDED TO MATCH ASCE 7. • REQUIREMENT TO DESIGN FOR HYDROSTATIC LOADS ON BREAKAWAY WALLS (FLOOD PROOFING MEASURES) REQUIRED IF NOT DESIGNED TO ASCE 24. 	MINIMAL	ERIK
362.1603	UPDATE	DIS	362.1603 – ROOF SNOW LOAD: RETAIN AMENDMENT, CORRECT TYPOS AND REWORD TO ADDRESS ADDITIONAL REQUIREMENTS ONLY.	NONE	ERIK
362.1604	UPDATE	DIS	362.1604 – ALTERNATE STANDARDS: RETAIN AMENDMENT AS WRITTEN. PROVIDES ALTERNATIVE TO STANDARD DESIGNS AND REFERENCES SUBMITTAL REQUIREMENTS IN 361.	NONE	ERIK
362.1607	<i>REVISE</i>	DIS	362.1607 – LIVE LOADS: RETAIN AMENDMENT BUT <i>REVISE TO IMPROVE CLARITY AND UNDERSTANDING.</i>	NONE	ERIK
362.1608	UPDATE	DIS	362.1608 – SNOW LOADS: (1) UNBALANCED SNOW LOADS - RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL DESIGN ALTERNATIVES TO ASCE 7 COMPLIANCE.	NONE	ERIK
362.1611	UPDATE	DIS	362.1611 – ROOF DRAINS: RETAIN AMENDMENT AS WRITTEN, PROVIDES DIRECTION TO COMPLY WITH SPS 382 (WISCONSIN PLUMBING CODE) FOR SECONDARY ROOF DRAIN CONNECTIONS.	NONE	ERIK
362.1613	UPDATE	DIS	362.1613 – EARTHQUAKE LOADS: RETAIN AMENDMENT AS WRITTEN, PROVIDES RESOURCE FOR EARTHQUAKE LOAD DESIGN BASED ON ZIP CODE.	NONE	ERIK

	CHAPTER 17	ADDITION/ MODIFICATION	ICC/DIS	<p>SPECIAL INSPECTIONS AND TESTS</p> <ul style="list-style-type: none"> • REQUIREMENT FOR STRUCTURAL OBSERVATION TO BE IN PERSON FOR RISK CATEGORIES II AND IV. • SPECIAL INSPECTION OF PRECAST CONCRETE DIAPHRAGM CONNECTIONS ADDED. • EMPIRICALLY DESIGNED MASONRY NO LONGER PERMITTED IN RISK CATEGORY IV BUILDINGS. • <u>*SPECIAL INSPECTION REQUIREMENTS FOR MASS TIMBER ANCHORAGE AND CONNECTION.</u> • PROVISIONS FOR ENGINEERING ASSESSMENT OF DEEP FOUNDATION INSTALLATIONS IF OBSERVABLE DEFECTS ARE EVIDENT. • SPECIAL INSPECTION RESPONSIBILITIES FOR STEEL STORAGE RACKING CLARIFIED. • SPECIAL INSPECTION REQUIRED FOR FIRE RATED ASSEMBLY COMPONENTS IN GROUP R FIRE AREAS HAVING AN OCCUPANT LOAD GREATER THAN 250. • SPECIAL TESTING OF EXTERIOR DOOR AND WINDOW ASSEMBLIES CLARIFIED. • IMPACT PROTECTION OF GLAZING FROM WINDBORNE DEBRIS REQUIREMENTS CLARIFIED. 	MODERATE	ERIK
362.1700		UPDATE	DIS	<p>362.1700 – STRUCTURAL TESTS AND SPECIAL INSPECTIONS: RETAIN AMENDMENT AS WRITTEN, EXCLUDES CHAPTER 17 WITH THE EXCEPTION OF THE REQUIREMENTS FOR DESIGN STRENGTHS OF MATERIALS, ALTERNATIVE TEST PROCEDURES, IN-SITU LOAD TESTS AND PRECONSTRUCTION LOAD TESTS. ALL 4 OF THESE SECTIONS OUTLINE REQUIREMENTS AND PROCEDURES FOR TESTING CONSTRUCTION MATERIALS OR SYSTEMS WHEN DEEMED NECESSARY BY THE BUILDING OFFICIAL OR REGISTERED DESIGN PROFESSIONAL.</p>	NONE	ERIK

	CHAPTER 18			SOILS AND FOUNDATIONS <ul style="list-style-type: none"> • FROST PROTECTION PROVISIONS ADDED FOR EGRESS DOORS. • MAXIMUM ALLOWABLE STRESS FOR MATERIALS USED IN DEEP FOUNDATION ELEMENTS UPDATED TO CURRENT MATERIALS CAPACITIES. • ALLOWABLE AXIAL DESIGN LOAD CALCULATION FOR HELICAL PILES CLARIFIED. • DESIGN AND DETAILING OF H-PILES FOR SEISMIC CATEGORY D, E OR F BUILDINGS CHANGED TO REQUIREMENTS IN AISC 341. • DEEP FOUNDATION ELEMENT SPLICING CHANGE FOR SEISMIC DESIGN CATEGORIES A AND B. • DESIGN OF PRECAST CONCRETE PILES CHANGED FROM IBC TO ACI 318. • PILE CAP REQUIREMENTS UPDATED TO REQUIREMENTS IN ACI 318. • LOAD TESTS NOT REQUIRED FOR VIBRATORY DRIVEN PILES. 	MINIMAL	ERIK
362.1802	UPDATE	DIS	362.1802 – DEFINITIONS: RETAIN AMENDMENT AS WRITTEN, DEFINES “NEUTRAL PLANE”.	NONE	ERIK	
362.1803	UPDATE	DIS	362.1803 – DEEP FOUNDATIONS: RETAIN AMENDMENT AS WRITTEN, REMOVES REQUIREMENT FOR SPECIAL INSPECTIONS.	NONE	ERIK	
362.1804	UPDATE	DIS	362.1804 – GROUND IMPROVEMENT – RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS FOR GROUND IMPROVEMENT MEASURES NOT ADDRESSED IN THE 2021 EDITION.	NONE	ERIK	
362.1805	UPDATE	DIS	362.1805 – BASEMENT FLOOR BASE COURSE – RETAIN AMENDMENT AS WRITTEN, ADDS REQUIREMENT FOR SEPARATION MATERIAL BETWEEN BASE COURSE AND SUBSTRATE NOT ADDRESSED IN 2021 EDITION.	NONE	ERIK	
362.1806	UPDATE/ <i>ADD</i>	DIS	362.1806 – PRESUMPTIVE LOAD BEARING VALUES FOR SATURATED SOILS – RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL CONSERVATIVE MEASURE FOR DESIGN OF FOOTING AND FOUNDATIONS IN AREAS OF SATURATED SOILS. <i>DEFINE SATURATED SOILS.</i>	NONE	ERIK	
362.1807	<i>CHANGE</i>	DIS	362.1807 – SHALLOW POST FOUNDATIONS: <i>DELETE AMENDMENT BASED ON ALTERNATE DESIGN CRITERIA PERMITTED IF APPROVED BY THE BUILDING OFFICIAL IN THE CODE LANGUAGE.</i>	NONE	ERIK	
362.1808	<i>CHANGE</i>	DIS	362.1808 – FOUNDATIONS: <i>DELETE AMENDMENT, CODE LANGUAGE ALLOWS FOR ALTERNATE PROVISIONS IF APPROVED BY BUILDING OFFICIAL.</i>	NONE	ERIK	

362.1809	UPDATE	DIS	362.1809 – FROST PROTECTED SHALLOW FOUNDATIONS: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS FOR SEMI-HEATED BUILDINGS AND MORE LENIENT EXCEPTION FOR SPECIFIC BUILDING CONDITIONS.	NONE	ERIK
362.1810	UPDATE	DIS	362.1810 – DEEP FOUNDATIONS: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL DESIGN CRITERIA NOT ADDRESSED IN 2021 EDITION.	NONE	ERIK
CHAPTER 19	ADDITION/ MODIFICATION	ICC/DIS	CONCRETE <ul style="list-style-type: none"> • ACI 318 UPDATED (REFERENCED STANDARD) • ACI 117 AND ITG-7 (TOLERANCES) ADDED TO IBC BY REFERENCE. 	NONE	ERIK
362.1908	<i>CHANGE</i>	DIS	SHOTCRETE CLEARANCE: <i>REVISE AMENDMENT TO ADDRESS BUILDING OFFICIAL/CODE OFFICIAL/DEPARTMENT.</i>	NONE	ERIK
CHAPTER 20	NONE	ICC/DIS	ALUMINUM <ul style="list-style-type: none"> • NO CHANGES 	NONE	ERIK
CHAPTER 21	ADDITION/ MODIFICATION	ICC/DIS	MASONRY <ul style="list-style-type: none"> • USE OF PLASTER AS AN EXTERIOR FINISH FOR ADOBE CONSTRUCTION ADDED AND CLARIFIED. 	NONE	ERIK
362.2109	UPDATE	DIS	362.2109 – EMPIRICAL DESIGN OF MASONRY: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS FOR MASONRY LINTELS AND JOINT SPACING IN MASONRY CONSTRUCTION.	NONE	ERIK
CHAPTER 22	ADDITION/ MODIFICATION	ICC/DIS	STEEL <ul style="list-style-type: none"> • MOMENT CONNECTIONS IN SEISMIC DESIGN CATEGORY B AND C BUILDINGS REQUIRED TO BE PREQUALIFIED PER AISC 358 WHICH PROVIDES MORE CURRENT PROVISIONS THAN AISC 341. • FURTHER CLARIFICATION OF STEEL STORAGE RACK REQUIREMENTS. 	NONE	ERIK
362.2204	UPDATE	DIS	362.2204 – WELDED CONNECTIONS: RETAIN AMENDMENT AS WRITTEN, PROVIDES REQUIREMENTS FOR REGISTRATION OF STRUCTURAL WELDERS IN SPS 305.	NONE	ERIK
362.2211	UPDATE	DIS	362.2211 – STEEL TRUSSES SPANNING 60’ OR GREATER: RETAIN AMENDMENT AS WRITTEN, REMOVES THE REQUIREMENT FOR SPECIAL INSPECTIONS OF THE INSTALLATION AND TEMPORARY BRACING FOR LONG SPAN STEEL TRUSSES.	NONE	ERIK

	CHAPTER 23	ADDITION/ MODIFICATION	ICC/DIS	<p>WOOD</p> <ul style="list-style-type: none"> • CODE LANGUAGE DELETED IN IBC TO REFLECT UPDATED REQUIREMENTS IN ASTM E84 FOR FRTW. • REQUIREMENTS FOR PERMANENT WOOD TRUSS BRACING CLARIFIED. • <u>*TESTING OPTIONS PROVIDED FOR MASS TIMBER CONNECTING ELEMENTS.</u> • ADDITIONAL WOOD SHEATHING FASTENER OPTIONS ADDED AND UPDATED TO RESPOND TO NEW ASCE WIND LOADS. • CONCEALED SPACES PERMITTED IN FLOOR AND ROOF DECKS FOR TRADITIONAL HEAVY TIMBER CONSTRUCTION (MASS TIMBER ADDRESSED SEPARATELY). • 2021 AWC SPECIAL PROVISIONS FOR WIND AND SEISMIC WHICH ADDRESSES SHEAR WALL AND DIAPHRAGM DESIGN REFERENCED IN IBC. • EXTERIOR CRIPPLE WALL REQUIREMENTS CLARIFIED. • RAFTER TIE REQUIREMENTS UPDATED. 	MINIMAL	ERIK
362.2303		UPDATE	DIS	362.2303 – WOOD TRUSSES SPANNING 60’ OR GREATER: RETAIN AMENDMENT AS WRITTEN, REMOVES THE REQUIREMENT FOR SPECIAL INSPECTIONS OF THE INSTALLATION AND TEMPORARY BRACING FOR LONG SPAN WOOD TRUSSES.	NONE	ERIK
362.2304		UPDATE	DIS	362.2304 – GIRDER ENDS: RETAIN AMENDMENT AS WRITTEN, REQUIRES MOISTURE BARRIER AT UNTREATED WOOD/MASONRY/CONCRETE BEARING SURFACE.	NONE	ERIK
CHAPTER 24		NONE	ICC/DIS	<p>GLASS AND GLAZING</p> <ul style="list-style-type: none"> • NO CHANGES 	NONE	ERIK
362.2409		UPDATE	DIS	362.2409 – GLASS AND GLAZING FOR ELEVATORS: RETAIN INFORMATIONAL NOTE AS WRITTEN, PROVIDES CLARIFICATION AND DIRECTION TO SPS 318.	NONE	ERIK
CHAPTER 25		ADDITION/ MODIFICATION	ICC/DIS	<p>GYPSON BOARD, GYPSON PANEL PRODUCTS AND PLASTER</p> <ul style="list-style-type: none"> • WATER RESISTANT BARRIER REQUIREMENTS ADDED FOR STUCCO. 	NONE	ERIK
362.2503		UPDATE	DIS	362.2503 – GYPSON BOARD AND PLASTER: RETAIN AMENDMENT AS WRITTEN, REMOVES SPECIAL INSPECTIONS REQUIREMENT.	NONE	ERIK
362.2510		REVISE	DIS	362.2510 – WATER RESISTIVE BARRIERS: <i>REVISE WORDING AS FOLLOWS:</i> THE VERTICAL LEG OF <i>ANY</i> FLASHING AT THE BASE OF AN <i>EXTERIOR</i> WALL <i>WHICH INCLUDES</i> TWO LAYERS OF A WATER RESISTIVE BARRIER SHALL BE INSTALLED <i>IN A MANNER THAT PLACES THE VERTICAL LEG OF THE FLASHING BENEATH AND</i> BEHIND BOTH LAYERS OF THE WATER RESISTIVE BARRIER.	NONE	ERIK

	CHAPTER 26	NONE	ICC/DIS	PLASTIC • NO CHANGES	NONE	ERIK
	CHAPTER 27	NONE	ICC/DIS	ELECTRICAL • NO CHANGES	NONE	ERIK
362.2701	UPDATE	DIS		362.2701 – ELECTRICAL CODE: RETAIN AMENDMENT AS WRITTEN, DEFERS ICC ELECTRICAL CODE REFERENCE TO SPS 316.	NONE	ERIK
	CHAPTER 28	NONE	ICC/DIS	MECHANICAL • NO CHANGES (DEFERS TO IMC AND IFGC).	NONE	ERIK
	CHAPTER 29	ADDITION/MODIFICATION	ICC/DIS	PLUMBING SYSTEMS • CHANGES ADDRESSING GENDER DESIGNATION OF TOILET ROOMS AND EQUALITY OF ACCESS. • DISTANCE LIMITS NO LONGER APPLICABLE TO STORAGE OCCUPANCIES.	MINIMAL	ERIK
362.2900	UPDATE	DIS		362.2900 – ADDITIONAL CRITERIA FOR TOILETS: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL OPTIONS FOR TEMPORARY USE AND OUTDOOR TOILET FACILITIES.	MINIMAL	ERIK
362.2901	UPDATE	DIS		362.2901 – PLUMBING CODE: RETAIN AMENDMENT AS WRITTEN, PROVIDES CLARIFICATION IN REGARDS TO SPS 381 – 387 (THE WISCONSIN PLUMBING CODE).	NONE	ERIK
362.2902	UPDATE/ <i>CHANGE</i>	DIS		362.2902 – PLUMBING FIXTURES: RETAIN AMENDMENT AS WRITTEN WITH THE FOLLOWING EXCEPTIONS: <i>DELETE EXCEPTIONS 2 AND 6 WHICH DO NOT ADDRESS PRIVATE USE OF LAVATORIES, ADD REFERENCE TO STATUTORY LANGUAGE (POTTY PARITY) IN 101.128.</i> REMAINDER OF AMENDMENT AND INFORMATIONAL NOTES ADDRESS SPECIFIC CONCERNS IN REGARDS TO QUANTITIES, SUBSTITUTIONS ALLOWED, TYPES OF FIXTURES FOR CERTAIN OCCUPANCIES, SPECIFIC REQUIREMENTS FOR PRIVATE USE OF LAVATORIES AND SPECIFIC INSTANCES WHERE FIXTURE COUNT CAN BE REDUCED OR ARE NOT REQUIRED.	MINIMAL	ERIK
362.2903	UPDATE	DIS		362.2903 – DRINKING FACILITIES: RETAIN AMENDMENT AS WRITTEN, RESTRICTS WATER COOLERS, DRINKING FOUNTAINS AND BOTTLE FILLING STATIONS FROM BEING LOCATED IN PUBLIC REST ROOMS.	NONE	ERIK
	CHAPTER 30	MODIFICATION	ICC/DIS	ELEVATORS AND CONVEYING SYSTEMS • CLARITY PROVIDED FOR TWO WAY COMMUNICATION FEATURES FOR ACCESSIBLE ELEVATORS.	MINIMAL	ERIK
362.3001	UPDATE	DIS		362.3001 – ELEVATORS: RETAIN AMENDMENT AS WRITTEN, PROVIDES DIRECTION TO SPS 318.	NONE	ERIK

362.3002	UPDATE	DIS	362.3002 – HOISTWAY ENCLOSURES: RETAIN AMENDMENT AS WRITTEN, PROVIDES SPECIFIC REQUIREMENTS FOR EMERGENCY ACCESS/STRETCHER SIZED ELEVATORS, VENTING AND MECHANICAL RESTRICTIONS IN ELEVATOR HOISTWAYS.	NONE	ERIK
362.3003	UPDATE	DIS	362.3003 – STANDARDIZED FIRE SERVICE ELEVATOR KEYS: RETAIN AMENDMENT AS WRITTEN, PROVIDES SPECIFIC REFERENCE TO REQUIREMENTS IN SPS 318.	NONE	ERIK
362.3005	UPDATE	DIS	362.3005 – MACHINE ROOMS: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS AND INFORMATIONAL NOTES RELATIVE TO ELEVATOR EQUIPMENT ROOMS THAT ARE NOT ADDRESSED IN THE 2021 EDITION.	NONE	ERIK
CHAPTER 31	MODIFICATION	DIS	SPECIAL CONSTRUCTION <ul style="list-style-type: none"> • SPECIAL EVENT STRUCTURES ADDED AND ARE TO BE REGULATED BY BOTH THE IBC AND IFC. • PUBLIC USE REST ROOMS LOCATED WITHIN FLOOD HAZARD AREAS OF PUBLICLY OWNED LANDS ARE PERMITTED TO BE AT/ABOVE GRADE AND BELOW BASE FLOOD ELEVATION. • INTERMODAL SHIPPING CONTAINERS USED AS BUILDINGS ARE REQUIRED TO COMPLY WITH IBC. 	MINIMAL	ERIK
362.3100	UPDATE	DIS	362.3100 – SPECIAL CONSTRUCTION: RETAIN AMENDMENT AS WRITTEN, PROVIDES SPECIFIC REQUIREMENTS FOR MAUSOLEUM CONSTRUCTION NOT ADDRESSED IN THE 2021 EDITION.	NONE	ERIK
362.3102	UPDATE	DIS	362.3102 – BLOWER EQUIPMENT: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS FOR BLOWER ROOM EQUIPMENT NOT ADDRESSED IN THE 2021 EDITION.	NONE	ERIK
362.3103	UPDATE	DIS	362.3103 – TEMPORARY STRUCTURES: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL REQUIREMENTS FOR TEMPORARY STRUCTURES RELATIVE TO LOCAL JURISDICTION PERMITTING.	NONE	ERIK
362.3104	UPDATE	DIS	362.3104 – PEDESTRIAN WALKWAYS AND TUNNELS: RETAIN AMENDMENT AS WRITTEN, PROVIDES CLARIFICATION FOR WHEN A CONNECTING BUILDING CAN BE CONSIDERED AS A SEPARATE STRUCTURE.	NONE	ERIK
362.3109	UPDATE	DIS	362.3109 – SWIMMING POOL STRUCTURES: RETAIN AMENDMENT AS WRITTEN, PROVIDES INFORMATIONAL NOTE DIRECTING TO SPS 390. ADD LANGUAGE THAT RESOLVES CONFLICT IN FENCE HEIGHT (4' VS 5') BETWEEN POOL CODE AND IBC.	NONE	ERIK

	CHAPTER 32	NONE	ICC/DIS	ENCROACHMENTS INTO THE PUBLIC RIGHT OF WAY <ul style="list-style-type: none"> NO CHANGES 	NONE	ERIK
362.3200		UPDATE	DIS	362.3200 - ENCROACHMENTS INTO THE PUBLIC RIGHT OF WAY: RETAIN AMENDMENT AS WRITTEN, EXCLUDES THE REQUIREMENTS OF CHAPTER 32.	NONE	ERIK
	CHAPTER 33	MODIFICATION	ICC/DIS	SAFEGUARDS DURING CONSTRUCTION <ul style="list-style-type: none"> SCOPING PROVISIONS ADDRESSING THE REQUIREMENTS FOR A WATER SUPPLY FOR THE PURPOSE OF FIRE FIGHTING ESTABLISHED. 	MINIMAL	ERIK
362.3300		UPDATE/ <i>REVISE</i>	DIS	362.3300 – SAFEGUARDS DURING CONSTRUCTION: RETAIN AMENDMENT AS WRITTEN, <i>MOVE 362.3307 INFORMATIONAL NOTE TO 362.3300.</i>	NONE	ERIK
362.3307		UPDATE	DIS	362.3307 – PROTECTION OF ADJOINING PROPERTY: RETAIN AMENDMENT AS WRITTEN, PROVIDES INFORMATIONAL NOTE IN REGARDS TO EXCAVATION ON ADJOINING PROPERTY.	NONE	ERIK
	CHAPTER 34	NONE	N/A	RESERVED SPACE WITHIN CODE DOCUMENT	NONE	ERIK
	CHAPTER 35	NONE	N/A	REFERENCED STANDARDS	NONE	ERIK
362.3500		UPDATE	DIS	362.3500 – REFERENCED STANDARDS: RETAIN AMENDMENT AS WRITTEN, PROVIDES CLARIFICATION OF REFERENCED STANDARDS CONVENTION.	NONE	ERIK
	APPENDICES	NONE	ICC	APPENDICES A THRU O <ul style="list-style-type: none"> APPENDIX O – PERFORMANCE BASED APPLICATION ADDED. 	NONE	ERIK
362.3600		UPDATE/ <i>ADD</i>	DIS	362.3600 – APPENDICES: RETAIN AMENDMENT AS WRITTEN, EXCLUDES SPECIFIC APPENDICES. <i>ADD AMENDMENT TO EXEMPT APPENDIX “O” – PERFORMANCE BASED APPLICATION.</i>	NONE	ERIK

Wisconsin Department of Safety and Professional Services

Plumbing Code Advisory Committee Plumbing Code Rule Recommendations for **SPS Chapters 305, 381 to 387**

DRAFT – SUBJECT TO CHANGE

THIS DOCUMENT IS NOT A RULE DRAFT OR THE OFFICIAL MEETING MINUTES OF THE PLUMBING CODE ADVISORY COMMITTEE.

Meeting minutes and agendas may be viewed [HERE](#).

SPS 382						
NO.	RULE PROVISION	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE AND PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
				<i>IECC/ Plumbing</i>	9/24/2021	
				Document for October 11, 2021 Commercial Building Code Meeting		
				Submit by September 24th.		

<p>161 continued</p>	<p>SPS 382.40(5)(b)</p>	<p>REVISE.</p>	<p>OPTION 1</p>	<p>SPS 382.40(5)(b) Temperature maintenance. <i>For application to all commercial buildings. Inclusive of residential buildings with 3 tenants or more, which are 4 stories in height or greater above grade plane.</i> Except as required in SPS 382.50(3)(b), if the developed length of hot water distribution piping from the source of the hot water supply to a plumbing fixture or appliance exceeds 100 feet distances in accordance with IECC C404.5.1 as presented on Table C404.5.1 or Per C404.5.2 and C404.5.2.1, a circulation system or self-regulating electric heating cable shall be provided to maintain the temperature of the hot water within the distribution piping.</p> <ol style="list-style-type: none"> 1. <i>Except as required in SPS 382.50(3)(b)</i>, if a circulation system is used to maintain the temperature, no uncirculated hot water distribution piping may exceed 25 feet distances in accordance with IECC C404.5.1 as presented on Table C404.5.1 or Per C404.5.2 and C404.5.2.1, in developed length. <u>Heated-water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe to the water heater. Gravity and thermo-syphon circulating systems are prohibited. Except as required in SPS 382.50(3)(b) Controls for the circulating hot water system pumps shall automatically turn off the pump when the water is the circulation loop is at the desired temperature and when there is not a demand for hot water or shall be designed per C404.6.1 whichever is most restrictive</u> 2. <i>Except as required in SPS 382.50(3)(b)</i>, if a self-regulating electric heating cable is used to maintain the temperature, the cable shall extend to within 25 feet distances in accordance with IECC C404.5.1 as presented on Table C404.5.1 or Per C404.5.2 and C404.5.2.1, of each fixture or the appliance. 3. Water distribution piping conveying circulated water or served by a self-regulating electric heating cable shall be insulated in accordance with chs. SPS 322.44(2). and SPS 361 to 366 or IECC C403. <u>to limit the heat loss at the external surface of the pipe insulation to a maximum of 25 BTUs per hour per square foot for aboveground piping and 35 BTUs per hour per square foot for underground piping. The maximum heat loss shall be determined at a temperature differential, T, equal to the maximum water temperature minus a design ambient temperature no higher than 65° F.</u> 4. Water distribution piping served by self-regulating electric heating cable shall be identified as being electrically traced in accordance with ch. SPS 316. 5. The installation of self-regulating electric heating cable may be subcontracted by a plumber to another trade. <p>note: see a-382.40 (5) for pipe insulation requirements.</p>	<p>Bruce</p>	
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				<p>(c) Water heaters. all water heaters and safety devices shall be designed and constructed in accordance with s. SPS 384.20 (5) (p).</p> <p>Note: Water heaters are to be installed in accordance with the requirements specified in chs. sps 361 to 366 and chs. sps 320 to 325 with respect to energy efficiency, enclosures, clearances, and venting.</p>		
162	SPS 382.40(5) (bm)	CREATED	OPTION 1	<p><u>SPS 382.40(5)(bg) Temperature maintenance.</u> for other buildings other than defined in (5)(b). if the developed length of hot water distribution piping from the source of the hot water supply to a plumbing fixture or appliance exceeds 100 feet, a circulation system or self-regulating electric heating cable shall be provided to maintain the temperature of the hot water within the distribution piping.</p> <p>1. If a circulation system is used to maintain the temperature, no uncirculated hot water distribution piping may exceed 25 feet in developed length.</p> <p>2. If a self-regulating electric heating cable is used to maintain the temperature, the cable shall extend to within 25 feet of each fixture or the appliance.</p> <p>3. Water distribution piping conveying circulated water or served by a self-regulating electric heating cable shall be insulated in accordance with chs. <u>SPS 322.44(2)</u>. and SPS 361 to 366 <u>or IECC C403</u>.</p> <p>4. Water distribution piping served by self-regulating electric heating cable shall be identified as being electrically traced in accordance with ch. SPS 316.</p> <p>5. The installation of self-regulating electric heating cable may be subcontracted by a plumber to another trade.</p>		Bruce
				<p>Note: See 382 appendix for charts and details of the amended IECC tables and requirements.</p>		

			OPTION 1	<p><u>SPS 382.40(5)(bm) Hot-water circulating and temperature maintenance systems.</u></p> <p><u>1. Automatic controls, temperature sensors and pumps shall be in a location with access. manual controls shall be in a location with ready access.</u></p> <p><u>2. Circulation systems. Hot-water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is not a demand for hot water.</u></p> <p><u>3. Demand recirculation controls. Demand recirculation water systems shall have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture, or sensing the flow of hot or tempered water to a fixture fitting or appliance.</u></p> <p><u>4. Heat trace systems. Electric heat trace systems shall comply with IECC 515.1. controls for such systems shall be able to automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy. Heat trace shall be arranged to be turned off automatically when there is not a demand for hot water.</u></p> <p><u>5. Controls for hot water storage. The controls on pumps that circulate water between a water heater and a heated-water storage tank shall limit operation of the pump from heating cycle startup to not greater than 5 minutes after the end of the cycle.</u></p>		
163	382.50(3)(B)	Revise an already approved code change	OPTION 1	<p>SPS 382.50(3)(b)4. <u>A hot water distribution system using thermal disinfection, as specified in SPS 382.50(3)(b)6.a., shall be under constant recirculation to provide continuous hot water at each hot water outlet, except that uncirculated hot water distribution piping may not exceed 3 feet in developed length. <u>except for where more restrictive, in accordance with IECC C404.5.1 as presented on table C404.5.1 or Per C404.5.2 and C404.5.2.1.</u></u></p>		Bruce

				Option two: measured changes in SPS 382.40 to IECC C404.		
164	SPS 381.01(XX).	CREATE. Definition	OPTION 2	<u><i>SPS 381.01(XX). Public lavatory: Is a lavatory located in a public restroom; located outside of a public restroom; a hand wash sink required by Dept. of Agriculture Trade and Consumer Protection (DATCP), Dept. of Health Services (DHS), National Institute of Health (NIH), or United States Dept. of Agriculture (USDA) are considered public lavatory fixtures.</i></u>		Bruce

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165	SPS 382.40(5)(b)	REVISE	OPTION 2	<p>SPS 382.40(5)(b) <i>Temperature maintenance. For application to all commercial buildings. Inclusive of residential buildings with 3 tenants or more, which are 4 stories in height or greater above grade plane. Except as required in SPS 382.50(3)(b), if the developed length of hot water distribution piping from the source of the hot water supply to a plumbing fixture, public lavatory, or appliance exceeds 100 feet the distances in Table 382.40(X) or the maximum pipe distances for a public lavatory may be calculated by the maximum allowable volume of 8 ounces of uncirculated water using Table 382.40(Y). Fixture fittings, fixture supply connectors, and faucets shall not be part of this calculation, a circulation system or self-regulating electric heating cable shall be provided to maintain the temperature of the hot water within the distribution piping.</i></p> <p><i>1. Except as required in SPS 382.50(3)(b), if a circulation system is used to maintain the temperature, no uncirculated hot water distribution piping may exceed 25 feet the distances in Table 382.40(X) or the maximum pipe distances for a public lavatory may be calculated by the maximum allowable volume of 8 ounces of uncirculated water using Table 382.40(Y). Fixture fittings, fixture supply connectors, and faucets shall not be part of this calculation in developed length.</i></p> <p><i>2. Except as required in SPS 382.50(3)(b), if a self-regulating electric heating cable is used to maintain the temperature, the cable shall extend to within 25 feet of the distances in Table 382.40(X) or the maximum pipe distances for a public lavatory may be calculated by the maximum allowable volume of 8 ounces of uncirculated water using Table 382.40(Y). Fixture fittings, fixture supply connectors, and faucets shall not be part of this calculation of each fixture or the appliance.</i></p> <p><i>3. Water distribution piping conveying circulated water or served by a self-regulating electric heating cable shall be insulated in accordance with chs. SPS 322.44(2), and SPS 361 to 366 or IECC C403. to limit the heat loss at the external surface of the pipe insulation to a maximum of 25 BTUs per hour per square foot for aboveground piping and 35 BTUs per hour per square foot for underground piping. The maximum heat loss shall be determined at a temperature differential, T, equal to the maximum water temperature minus a design ambient temperature no higher than 65°F.</i></p> <p><i>4. Water distribution piping served by self-regulating electric heating cable shall be identified as being electrically traced in accordance with ch. SPS 316.</i></p> <p><i>5. The installation of self-regulating electric heating cable may be subcontracted by a plumber to another trade.</i></p> <p><i>note: see a-382.40 (5) for pipe insulation requirements.</i></p>		<p style="text-align: center;">Bruce</p> <p style="text-align: center;">TABLES X AND Y ARE PLACEHOLDERS</p>
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166	SPS 382.40(5) (bm)		OPTION 2	<p><u>SPS 382.40(5)(bg) Temperature maintenance. for other buildings other than defined in (5)(b). if the developed length of hot water distribution piping from the source of the hot water supply to a plumbing fixture or appliance exceeds 100 feet, a circulation system or self-regulating electric heating cable shall be provided to maintain the temperature of the hot water within the distribution piping.</u></p> <p><u>1. If a circulation system is used to maintain the temperature, no uncirculated hot water distribution piping may exceed 25 feet in developed length.</u></p> <p><u>2. If a self-regulating electric heating cable is used to maintain the temperature, the cable shall extend to within 25 feet of each fixture or the appliance.</u></p> <p><u>3. Water distribution piping conveying circulated water or served by a self-regulating electric heating cable shall be insulated in accordance with chs. SPS 322.44(2), and SPS 361 to 366 or IECC C403.</u></p> <p><u>4. Water distribution piping served by self-regulating electric heating cable shall be identified as being electrically traced in accordance with ch. SPS 316.</u></p> <p><u>5. The installation of self-regulating electric heating cable may be subcontracted by a plumber to another trade.</u></p> <p>Note: Water heaters are to be installed in accordance with the requirements specified in chs. <u>SPS 361 to 366</u> and chs. <u>SPS 320 to 325</u> with respect to energy efficiency, enclosures and venting.</p>		

				<p><u>SPS 382.40(5)(bm) Hot-water circulating and temperature maintenance systems.</u></p> <p><u>1. Automatic controls, temperature sensors and pumps shall be in a location with access. manual controls shall be in a location with ready access.</u></p> <p><u>2. Circulation systems. Hot-water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is not a demand for hot water.</u></p> <p><u>3. Demand recirculation controls. Demand recirculation water systems shall have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture, or sensing the flow of hot or tempered water to a fixture fitting or appliance.</u></p> <p><u>4. Heat trace systems. Electric heat trace systems shall comply with IEEE 515.1. controls for such systems shall be able to automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy. Heat trace shall be arranged to be turned off automatically when there is not a demand for hot water.</u></p> <p><u>5. Controls for hot water storage. The controls on pumps that circulate water between a water heater and a heated-water storage tank shall limit operation of the pump from heating cycle startup to not greater than 5 minutes after the end of the cycle.</u></p>		
			OPTION 2			

Table-382.40-(X)

NOMINAL PIPE SIZE (inches)	VOLUME (liquid ounces per foot length)	MAXIMUM PIPING LENGTH (feet)	
		Public lavatory faucets	Other fixtures and appliances
1/4	0.33	24	25
3/8	0.5	16	25
3/8	0.75	12.5	25
1/2	1.5	6	25
5/8	2	4	25
3/4	3	2	25
7/8	4	0.5	25
1	5	0.5	25
1 1/4	6	0.5	25
1 1/2	11	0.5	25
2 or larger	18	0.5	25

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 liquid ounce = 0.030 L, 1 gallon = 128 ounces. Note: Flow rate through 1/4" piping shall be not greater than .5 gpm. The flow rate through 5/16" piping shall be not greater than 1 gpm. The flow rate through 3/8" piping shall be not greater than 1.5 gpm.

OPTION
2

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Table- SPS 382.40-(Y)

OUNCES OF WATER PER FOOT OF TUBE									
Nominal Size (inches)	Copper Type M	Copper Type L	Copper Type K	CPVC CTS SDR 11	CPVC SCH 40	CPVC SCH 80	PE-RT SDR	Composite ASTM F1281	PEX CTS SDR 9
3/8	1.06	0.97	0.84	N/A	1.17	—	0.64	0.63	0.64
1/2	1.69	1.55	1.45	1.25	1.89	1.46	1.18	1.31	1.18
3/4	3.43	3.22	2.90	2.67	3.38	2.74	2.35	3.39	2.35
1	5.81	5.49	5.17	4.43	5.53	4.57	3.91	5.56	3.91
1 1/4	8.70	8.36	8.09	6.61	9.66	8.24	5.81	8.49	5.81
1 1/2	12.18	11.83	11.45	9.22	13.20	11.38	8.09	13.88	8.09
2	21.08	20.58	20.04	15.79	21.88	19.11	13.86	21.48	13.86

For SI: 1 foot = 304.8 mm, 1 inch = 25.4 mm, 1 liquid ounce = 0.030 L, 1 oz/ft² = 305.15 g/m².
N/A = Not Available.

OPTION
2

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Revise an already approved code section.

OPTION
2

SPS 382.50(3)(b)4. A hot water distribution system using thermal disinfection, as specified in SPS 382.50(3)(b)6.a., shall be under constant recirculation to provide continuous hot water at each hot water outlet, except that uncirculated hot water distribution piping may not exceed 3 feet in developed length. except for where more restrictive, in accordance with, in accordance with SPS 382.40(5)(b).

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170			<p>SPS 363.0404 Service water heating.</p> <ol style="list-style-type: none"> (1) Time switches. the requirements in IECC section C404.9.2 are not included as part of this chapter. (2) Heat traps. the requirements in IECC section C404.3 are not included as part of this chapter. (3) Pools and spas. the requirements in IECC sections C404.9.2 and C404.9.3 are not included as part of this chapter. (4) Circulation systems. substitute the following wording for the requirements in IECC section C404.6.1: heated water circulation systems shall be provided with a circulation pump. the system return pipe shall be a dedicated return pipe or a cold water supply pipe. gravity and thermo-syphon circulation systems shall be prohibited. controls for circulating hot water system pumps shall automatically turn off the pump when the water in the circulation loop is at the desired temperature. (5) Service water-heating system commissioning. the requirements of IECC section C404.11 are not included as part of chs. SPS 361 to 366. (6) <u>Heated water supply piping.</u> The requirements in IECC section C404.5 are not included as part of this chapter. (7) <u>Maximum Allowable length Method.</u> The requirements in IECC section C404.5.1 are not included as part of this chapter. (8) <u>Maximum allowable pipe volume method.</u> the requirements in IECC section C404.5.2 are not included as part of this chapter. (9) <u>Water volume determination.</u> The requirements in IECC section C404.5.2.1 are not included as part of this chapter. (10) <u>Heated-water circulating and temperature maintenance systems.</u> The requirements in IECC section C404.6 are not included as part of this chapter. (11) <u>Circulation systems.</u> The requirements in IECC section C404.6.1 are not included as part of this chapter. (12) <u>Demand recirculation controls.</u> The requirements in IECC section C404.6.1.1 are not included as part of this chapter. (13) <u>Heat trace systems.</u> The requirements in IECC section C404.6.2 are not included as part of this chapter. (14) <u>Controls for hot water storage.</u> The requirements in IECC section C404.6.3 are not included as part of this chapter. 		<p style="text-align: center;">BRUCE</p> <p style="text-align: center;">THIS IS FOR REFERENCE ONLY EXPLANATORY PURPOSES ONLY</p> <p style="text-align: center;">PLUMBING EXEMPTIONS TO THE IECC THROUGH SPS 363.0404</p>
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Wisconsin Department of Safety and Professional Services

DRAFT – SUBJECT TO CHANGE

Recommendations and Proposed Changes to – **Follow Up**
Final Draft for Code Committee Meeting
October 11, 2021

DRAFT

2021 INTERNATIONAL CODES

FOLLOW UP

NO.	IMC/SPS	ISSUE/REASON FOR CHANGE	PROPOSED BY	EXISTING LANGUAGE/PROPOSED CHANGE	POTENTIAL IMPACT/COST	COMMENTS/STATUS
	GENERAL	CLARIFICATION / CORRECTIONS	DIS	ICC SUMMARIZES MANY OF THE CHANGES TO THE 2021 EDITION AS “REARRANGING FOR CLARITY AND EASIER READING”. THE REQUIREMENTS HAVE NOT CHANGED BUT THE LOCATION WITHIN THE CODE HAS. CORRECT USE OF “EXCEPTION”, “CONDITION” AND “ITEM” IN AMENDMENT LANGUAGE AS APPROPRIATE. CORRECT CODE SECTION REFERENCES AS APPLICABLE TO 2021 EDITION VERIFY/CORRECT OTHER TESTING AGENCIES, REFERENCED CODES AND CODE SECTIONS AS APPLICABLE. MINOR CHANGES TO CODE LANGUAGE THAT DOES NOT SIGNIFICANTLY IMPACT STAKEHOLDERS, ADD SIGNIFICANT COST TO PROJECTS PHYSICALLY OR PROCEDURALLY OR IMPACT DEPARTMENT REQUIREMENTS OR PROCESSES ARE DEEMED ACCEPTABLE.	N/A	ERIK
364.0402		CHANGE	DIS	364.0402 – NATURAL VENTILATION: HIGHLIGHT “DWELLING UNITS” AND REMOVE “KITCHENS” IN TABLE 364.0402. NATURAL VENTILATION TO ACHIEVE KITCHEN EXHAUST WILL NO LONGER BE PERMITTED.	SIGNIFICANT	KIM
364.0403		UPDATE	DIS	364.0403 – MECHANICAL VENTILATION: RETAIN AMENDMENT AS WRITTEN, PROVIDES ADDITIONAL DESIGN OPTIONS USING ENGINEERED ANALYSIS.	NONE	KIM
364.0505		CHANGE	DIS	364.0505 – DOMESTIC KITCHEN EXHAUST EQUIPMENT: REVISE AMENDMENT TO DELETE 505.3 EXCEPTION 1. RESIDENTIAL OCCUPANCIES SHALL BE REQUIRED TO EXHAUST KITCHEN COOKING EQUIPMENT OUTSIDE OF A THE BUILDING, NATURAL VENTILATION WILL STILL BE PERMITTED FOR MAKE UP AIR.	SIGNIFICANT	KIM