

CENTRAL IOWA CODE CONSORTIUM  
MEETING MINUTES  
INTERNATIONAL FIRE CODE COMMITTEE  
Ankeny Fire Headquarters  
120 NW Ash Dr.  
August 15, 2018

MEETING MINUTES

1) CALL TO ORDER

Craig Fraser called the meeting to order at 02:10 pm.

2) ROLL CALL

MEMBER	PRESENT	ABSENT
Craig Fraser, Chair	X	
Kurt Westhoff, Vice-Chair		X
Bart Caldwell, Secretary	X	
Craig Ver Huel	X	
Justin Frederick	X	
Pam Rosa	X	
Kris Schultz	X	

Chief Robinson joined the meeting on conference call.

3) AGENDA APPROVAL

A motion to approve the agenda was made by Bart Caldwell and seconded by Justin Frederick. The motion received unanimous approval.

4) PUBLIC COMMENT

None.

5) APPROVE MINUTES FROM THE PREVIOUS MEETING

A motion to approve the agenda was made by Kris Schultz and seconded by Justin Frederick. The motion received unanimous approval.

6) AGENDA

The following changes to the International Fire Code 2018 Edition were discussed:

a) **Review of CICC 2015 Chapter 38 Revisions**

- i) A new Chapter 38 Higher Education Laboratories has been added to 2018 IFC. The existing Chapter 38 Special Events will need to be relocated.
- ii) Several sections from existing Chapter 38 Special Events are also covered in new areas of 2018 IFC. Propose modifying the following 2018 Sections as identified below and on the attached document.
  - (1) 2018 IFC Section 319 – Mobile Food Preparation Vehicles
    - (a) Amend for Fire Extinguishers, LP-gas cylinder hoses, and Location.
  - (2) 2018 IFC Section 3105 Temporary Special Event Structures
    - (a) Amend for Special Amusement Buildings
  - (3) 2018 IFC Section 3106 Outdoor Assembly Events

(a) Amend to include permit requirements, exit requirements, LP-gas, and temporary water stations.

(4) 2018 IFC Section 3107 Operational Requirements

(a) Amend to include requirements for concession stands, food booths, and retail booths.

(5) Add Section 3108 Mazes and 3109 Temporary Use Within Covered Mall Buildings

(6) 2018 IFC Appendix N – Indoor Trade Shows and Exhibitions

(a) Propose to rename to Special Events and merge remainder of 2015 Chapter 38 into the Appendix.

iii) Craig Fraiser made motion to accept changes as identified above. Craig Ver Huel seconded. All present approved.

b) **Review and discuss past changes left open for discussion**

i) Justin noted that previous 2015 amendments 606.12.5 and 901.4.6.1 conflict with new 2018 paragraphs. Committee recommends moving to 605.12.4 and 901.4.6.5, respectively.

ii) Committee recommends moving previous 2015 amendments 604.8 Shutdown of Emergency and Standby Power Systems and 604.9 Emergency Generator Signage be relocated to 1203.7 and 1203.8.

iii) Justin noted a conflict of proposed 1107 CSST with previous Fuel Fired Appliances amendment. Committee recommends moving to 1107.2 and 1107.3.

iv) Justin motioned to accept changes identified above. Craig Fraiser seconded. All present approved.

c) **Discuss any new provisions and recommendations for 2018 IFC**

i) None

1) OTHER BUSINESS

a) None

2) UPCOMING MEETINGS

No additional meetings required at this time. Craig Fraiser will schedule a meeting if additional proposals are received.

3) ADJOURNMENT

A motion to adjourn was made by Craig Fraiser and seconded by Craig Ver Huel. The motion received unanimous approval at 02:35 pm.

Minutes prepared and submitted by Bart Caldwell, Secretary

Posted at [www.capitalcrossroadsvision.com/central-iowa-code-consortium](http://www.capitalcrossroadsvision.com/central-iowa-code-consortium).

**319.4.2.1 Fire extinguishers.** Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. An approved 2A:20B:C rated dry chemical fire extinguisher shall be provided within 30 feet (9144 mm) of any commercial cooking equipment. Additionally, cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with Section 904.12.5.1 or 904.12.5.2, as applicable.

**319.8.6 LP-gas cylinder hoses.** Hoses shall be designed for a working pressure of 350 psig (2413 kPa) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI WORKING PRESSURE, and the manufacturer's name or trademark. Hose assemblies, after the application of couplings, shall have a design capability of 700 psig (4826 kPa). Hose assemblies shall be leak tested at the time of installation at not less the operating pressure of the system in which they are installed.

**319.11 Location.** Mobile food vehicles shall not be located within 20 feet (6096 mm) of buildings, tents, canopies or membrane structures.

Add definition for Maze

**3105.1.1 General.** [B] Special amusement buildings shall be in accordance with this section and Section 411 of the International Building Code.

**Exception:** Amusement buildings or portions thereof, which are without walls or a roof and are constructed to prevent the accumulation of smoke.

**3105.1.2 Temporary special amusement buildings.** Where the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means. The sprinkler piping shall be connected to a temporary water supply having sufficient capacity (flow and pressure) to supply residential or standard quick spray response sprinkler heads at a minimum design density of 0.15 gpm (.57 LPM) per square foot of protected floor area. The design shall be based on flowing the six most hydraulically remote sprinkler heads. Should the temporary amusement building contain less than six heads, the design shall assume that all heads are flowing simultaneously.

The temporary water supply may be connected to a domestic water line, a fire line, or temporary on-site storage tank as long as the minimum design densities are met. An indicating type control valve shall be installed in an accessible location between the sprinkler system and the connection to the water supply.

**3105.10 Use of combustible decorative materials.** Use of combustible decorative materials shall be in accordance with Chapter 8.

**3105.11 Assistance.** Adult monitors with flashlights shall be available to provide assistance in the event someone becomes lost or disoriented. One adult monitor shall be provided for every 60 persons.

**3106.2.1.1 Site plans.** A detailed site plan shall be submitted to the fire code official with each permit application for approval.

**3106.2.2 Outdoor events:** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:

1. The means of egress.
2. Location and width of exits and aisles.
3. Location of exit signs.
4. Location of fencing or means used to confine attendees.
5. Total square footage of enclosed space.
6. Location and arrangement of all tents, booths or cooking equipment.

7. Locations of fire apparatus access roads.
8. Location of fire protection equipment.
9. Type and location of heating and electrical equipment where applicable.
10. Location of temporary staffed water stations and permanent water fountains.

**3106.2.3 Mazes.** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:

1. Means of egress.
2. Location and width of exits and aisles.
3. Location of exit signs.
4. Total square footage of space.
5. Location and arrangement of all booths and cooking equipment.
6. Location of all fire protection equipment.
7. Location of means to confine attendees.
8. Locations of *fire apparatus access roads*.
9. Type and location of heating and electrical equipment where applicable.
10. Locations of structures.

At time of permit application, the event coordinator shall submit a letter from the property owner authorizing the use of the site, the address of the site, dates and hours of operation and names and 24-hour phone numbers of at least two principals.

**3106.3.1 Exits** shall comply with Chapter 10 and be as remote from each other as practical and shall be provided as follows:

<b>Occupant Load</b>	<b>Minimum Number of Exits</b>
1 to 500	2
501 to 1,000	3
1,001 or 1,500	4
Each additional 500 persons	36 additional inches of exit width

**3106.3.3 Width.** The aggregate clear width of exits shall be a minimum of 36 inches wide (914mm) for each 500 persons to be accommodated.

**3106.3.4 Signs.** Exits shall be identified with signs that read “EXIT”. The signs shall be weather-resistant with lettering on a contrasting background. The lettering shall be of sufficient height and brush stroke to be immediately visible from 75 feet (22,860mm). Placement of the exit signs shall be approved by the fire code official.

**Add following language to 3106.5.3** and NFPA 58.

**3106.5.3.1 Maximum number and quantity.** A maximum of a total aggregate water capacity of 50 gallons (95L) of LP-gas is permitted at one concession stand or booth used for cooking.

**3106.5.3.2 LP-gas high-pressure cylinder hoses.** Hoses shall be designed for a working pressure of 350 PSIG (2413 kPa) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI(2413 kPa) WORKING PRESSURE, and the manufacturer’s name or trademark. Hose assemblies, after the application of couplings, shall have a design capability of 700 PSIG (4826 kPa). Hose shall not exceed 12 feet (3638 mm) unless approved by the fire code official.

**3106.5.3.3 LP-gas low-pressure cylinder hoses.** Hoses with a working pressure of 5 psig shall be allowed when a fix regulator is set a 5 psi and is connected directly to the LP GAS cylinder. The hose shall not exceed 12 feet (3658 mm) unless approved by the fire code official.

**3106.5.3.4 Storage of containers.** Containers shall be stored in accordance with Chapter 61.

**3106.7 Temporary water stations.**

When outdoor temperatures are expected to exceed 90°F (35°C), the event sponsor shall provide and maintain a minimum of one staffed water station for each 1,000-projected attendance. The water station shall include adequate water supply, cups, and a means for rapid replenishing of exhausted water. Each water station shall be located as far apart as practicable to allow ease of access for event attendees.

**3107.20 Concession stands, food booths, and retail booths.**

**3107.20.1 General.** Concession stands, food booths and retail booths shall be in accordance with Section 3805.4.

**3107.20.2 Distances.** A minimum of 20 feet (6096mm) shall be provided between every 150 linear feet (45,720mm) of booth space. A minimum of 30 feet (9144mm) shall be provided between booths used for cooking and the vehicles, generators, or any other internal combustion engines. A minimum of 30 feet (9144 mm) shall be provided between booths used for cooking and amusement rides or devices.

**3107.21 Cooking appliances or devices.**

**3107.21.1 Public isolation.** Cooking appliances or devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a non-combustible 3-sided barrier between the equipment and devices and the public.

**3107.21.2** The following:

1. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
2. The cooking surface shall not exceed 288 square inches (18,580mm).
3. The equipment shall be placed on a noncombustible surface.
4. The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).

**3108 MAZES.**

**3108.1 General.** Mazes including, but not limited to corn stalk or hedge mazes, shall be in accordance with Section 3808.

**3108.1.2 Safe refuge areas.** Safe refuge areas shall be established outside of the maze or building and structure, and shall not be closer than 50 feet (15240mm).

**3108.1.3 Paths.** Paths throughout the maze shall be a minimum of 36 inches (914mm) in width and shall be clear and unobstructed width.

**3108.1.4 Separation.** A minimum of 20 feet (6096mm) shall be provided between mazes and buildings and structures. The 20-foot (6096mm) clearance shall be free from vegetation and obstructions.

**3108.1.5 Means of egress.** Each exit shall be a minimum of 6 feet (1828mm) wide.

**3108.1.5.1 Travel distance.** The maximum travel distance to reach an exit access shall not exceed 75 feet (22,860mm). The travel distance shall be determined by using the maze path.

**3108.1.5.2 Number.** The travel distance required to reach an exit access shall determine the number of exits required. Locking devices shall remain unlocked on exits when the maze is occupied.

**3108.1.5.3 Exit signs.** Exit signs shall be provided next to or above each exit. The lettering shall be a minimum of 12 inches (305mm) high with 2-inch (51mm) brushstroke. The signs shall read EXIT with lettering in a color contrasting to the sign's background.

**3108.1.6 Event plans.** The following plans shall be submitted to the fire code official.

**3108.1.6.1 General fire safety plan.** The plan shall include, but not be limited to procedures that shall be used to prevent over-drying of vegetation throughout the site, documentation of decorative materials flame-retardancy, the maximum number of attendees.

**3108.1.6.2 Security plan.** The plan shall document who shall provide security (e.g., off-duty police officers, sheriff's posse, employees). All security personnel shall be provided with a 2-way radio and flashlight.

**3108.1.6.3 Evacuation plans.** The plan shall document the responsibilities of all on-site employees. The plan shall also document how attendees will be evacuated, and where they will be evacuated.

**3108.1.6.4 Maze rules.** Maze rules shall be posted at maze entrance.

**3108.1.7 Employee responsibilities.** Each employee shall be familiar with the evacuation plan and with fire extinguisher locations. Documentation of training shall be provided to the fire code official.

**3108.1.7.1 Guides.** An employee shall be responsible for guiding a group of not more than 14 attendees through the maze. Each employee shall be provided with a minimum of one flashlight and two-way radio. The employees shall be responsible for detecting and reporting fire or smoke to a competent person posted at the maze main entrance and begin evacuation procedures.

**3108.1.7.2 Main entrance employee.** Each maze shall be manned by an employee at the entrance. The employee shall be capable of communicating with the employees and shall be provided with a cellular telephone. When the main entrance employee receives a report of smoke, fire or injury, the employee shall immediately call 9-1-1.

**3108.1.8 Watering.** Corn stalk and hedge mazes shall be provided with sufficient water and at a frequency that prevents the vegetation from becoming dry or brittle. Failure to comply with this provision is an imminent hazard and the fire code official shall issue a stop order.

**3108.1.9 Buildings and structures.** When buildings and structures are intended to be occupied by attendees, the building and structure shall comply with Section 3807.

## **3109 TEMPORARY USE WITHIN COVERED MALL BUILDINGS**

**3109.1 General.** Temporary use of the common pedestrian area within a covered mall building for promotional, Group A, Group E, Group M or similar activities shall be in accordance with Section 3809.

### **3109.2 General requirements.**

**3109.2.1 Main aisle width.** Main aisles shall be a minimum of 10 feet (3048mm) in width or the minimum required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10. Main aisles shall not be obstructed.

**3109. 2 .2 Cross aisle width.** Cross aisles shall be a minimum of 15 feet (4572mm) in width or the required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10.

**3109. 2 .3 Fueled equipment.** Liquid- or gas-fueled, or electric appliances, tools, apparatus, craft or vehicles shall be displayed in a mall in accordance with Section 314. LP-gas powered floor maintenance machines may be used when in accordance with Chapter 61.

**3109.3 Combustible decorative materials.** Combustible decorative materials shall be in accordance with Chapter 8.

## **Rename appendix N – Special Events**

### **Modify Scope of N101.1**

**N101.1 Scope.** Special events including trade shows and exhibitions, outdoor assembly events, outdoors mazes, special amusement buildings, and special scaffolding structures shall comply with this chapter and **chapter 31. Mobile Food Preparation vehicles comply with this chapter and Section 319.** Temporary indoor vehicle displays and vehicle competition or demonstrations shall comply with this chapter and Section 314.

## **N102**

**CROSS AISLES.**

**EXHIBITS.**

**FLAME EFFECT.**

**MAIN AISLE.**

**MAZE.**

**OUTDOOR ASSEMBLY EVENT.**

**TEMPORARY STRUCTURES.**

**TRADE SHOWS OR EXHIBITIONS.**

### **N103.4 Access for firefighting and medical services.**

Approved vehicle access for firefighting and medical services shall be provided in accordance with Sections 503 and 512.

### **N103.5 Fire protection equipment clearance.**

Clearance around all fire protection equipment shall be in accordance with Section 901.4.6.

**N107.2.1 Combustible storage.** Combustible materials stored at special events shall be stored in approved locations and containers.

**3803.3 Crowd managers.** Crowd managers shall be provided where the fire code official determines that an indoor or outdoor gathering warrants crowd control. Crowd managers shall be in accordance with Section 403.3.

### **N104.3 Decorative materials and furnishings.**

Curtains, drapes and decorations including, but is not limited to drapes, signs, banners, acoustical materials, cotton, hay, fabric, paper, straw, moss, split bamboo, and wood chips shall be flame resistant as demonstrated by testing in accordance with NFPA 701, or provide documentation of flame retardancy. Field flame test shall be in accordance with Section 320. Materials that cannot be treated for flame retardancy shall not be used unless approved by the fire code official. This includes but is not limited to oilcloth, tarpaper, nylon, plastic cloth, and other plastic materials.

**N104.4 Fire extinguishers.** Fire extinguishers shall be in accordance with Section 906 and NFPA 10

**N107.1.2 Specific prohibitions.** The following hazardous materials shall not be stored, handled or used in trade shows and exhibitions:

1. Division 1.1, 1.2, 1.3, and 1.5 explosives as classified by the U.S. Department of Transportation.
2. Detonable, Class I and Class II organic peroxides.
3. Class I-A flammable liquids.
4. Class 4 and Class 3 oxidizers.
5. Class 4 and Class 3 (unstable) reactive materials.
6. Class 3 water-reactive materials.
7. Pyrophoric materials.
8. Highly toxic materials
9. Toxic gases.
10. Fueling or defueling of flammable or combustible that are stored or used as liquids, cryogenics or compressed gases.

**N107.2.1 Quantity.** Combustible materials shall be limited to a one-day supply

**N107.2.3 Location.** Storage of combustible materials behind exhibits, booths, or tents is prohibited. Combustible materials, including but not limited to wood crates, paper and cardboard boxes, shall be stored outside the building in an approved area or in a storeroom having a fire-resistance rating of at least one hour and protected by an approved automatic fire-extinguishing system

**N107.2.4 Housekeeping.** The special event area and related areas shall be kept free from combustible debris at all times.

**N107.2.4 Waste disposal.** Combustible debris shall not be accumulated at special events. Combustible debris, rubbish and waste material shall be removed from special events at the end of each shift of work. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved.

**N107.5.6 LP-gas heaters.** Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 of the International Fire Code.

**N107.6.1 Demonstration cooking and warming equipment or devices.**

**N107.6.2 Public Isolation.** Equipment and devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a noncombustible 3-sided barrier between the equipment and devices and the public.

**N107.6.3 Protection.** Single-well cooking equipment using combustible oils or solids shall meet the following:

1. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
2. The cooking surface shall not exceed 288 square inches (1858 cm<sup>2</sup>).
3. The equipment shall be placed on a noncombustible surface.
4. The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).

**N107.6.4** Cooking equipment shall be separated from combustible materials by a horizontal distance of at least 2 feet (609mm).

**N017.6.5 Butane.** Butane for cooking equipment shall be limited to one 10 oz cylinder and one spare in storage, of the same size, per appliance. Storage location shall be approved by the fire code official.



**N107.6.6 General.** Cooking and warming devices for demonstration purposes only shall be in accordance with Section 3804.9.

**N107.6.7 Portable butane-fueled appliances.** Portable butane-fueled appliances are allowed in restaurants and in attended commercial food catering operations where fueled by not more than two 10 oz. (284gL) LP-gas capacity, non-refillable butane containers that have a water capacity not exceeding 1.08 lb. (0.5 kg) per container. The containers shall be directly connected to the appliance, and manifolding of containers is not permitted. Storage of cylinders is limited to 24 containers, with an additional 24 permitted where protected by a 2-hour fire-resistance-rated barrier.

**N108.4 Travel distance.** The maximum travel distance from any point in an exhibit to an exit access aisle shall not exceed 50 feet (15240mm).

**N108.5 Aisles.**

**N108.5.1 Aisle width.** Minimum aisle width inside a trade show or exhibition shall comply with the following:

<b>Square Footage of Trade Show or Exhibition</b>	<b>Minimum Aisle Width</b>
Greater than 15,000 square feet (1393m <sup>2</sup> )	10 feet (3048mm)
5,000 square feet (465 square meters) to 15,000 square feet (1393m <sup>2</sup> )	8 feet (2438mm)
Less than 5,000 square feet (465 m <sup>2</sup> )	6 feet (1829mm)

**N109 Exhibit construction and materials.** The materials used for an exhibit shall comply with Section 3804.4 and Chapter 8

**N109.1 Materials. Shall be one of the following:**

1. Noncombustible or limited-combustible materials.
2. Wood that is greater than 1/4-inch (6mm) nominal thickness
3. Wood 1/4-inch (6mm) nominal thickness or less that is pressure-treated fire-retardant wood meeting the requirements of NFPA 703, Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials. The product shall be marked or labeled by the manufacturer. The product shall not be painted or similarly modified until the material has been inspected and the marking or labeling verified, or provide documentation acceptable to the fire code official.

**N109.2 Plastics.** Plastics shall be limited to those that comply with Chapter 8. Plastics used in trade shows and exhibitions with an occupant load of 300 or more shall be Class A or Class B. Plastics used in trade shows and exhibitions with an occupant load of less than 300, shall be Class A, Class B or Class C.

**N110 Fireworks, pyrotechnics.** Fireworks and pyrotechnics shall comply with Chapter 56.

**N111 MOBILE FOOD VEHICLES**

**N111.1 General.** Mobile food vehicles which are temporarily or permanently stored on a property where food items are processed or prepared and sold to the public shall comply with this section and Section 319.

**Exception:** Food peddlers operating a retail food establishment from a vehicle designated to be readily movable in which food is; sold or given away but not composed, compounded, thawed, reheated, cut, cooked, processed or prepared.

**N112** Temporary special events shall comply with this chapter and with chapter 31.