

# **Construction Industry Communication#29**

From: Amit Ghosh, Chief Building Official

Re: Temporary Structure Procedures (to be used less than 180 days)

Date: February 12, 2024 (revised)

# **Background:**

The Ohio Building Code, the Ohio Fire Code and the Columbus City Code regulate temporary structures such as tents, stages and other special event structures. The term 'special event structure' may also refer to any temporary ground-supported structure, platform, stage, stage scaffolding or rigging, canopy, tower supporting audio or visual effects equipment, or similar structures not regulated within the scope of the International Building Code. Plan approval and inspections are required by both the Department of Building and Zoning Services and the Columbus Division of Fire.

Temporary Structures can be broken down into two types of permits:

# Commercial/Private/Gated

Temporary structures, utilized for less than 180 days, for the purpose of sales promotions, advertising displays, and additional capacity for restaurants and bars are considered commercial permits. Private or gated events are those where access is restricted to invitation only or when a participation fee, ticket or donation is required to access all or part of an event site and are considered commercial permits.

Commercial/Private/Gated permits are subject to full building permit and inspection fees as defined in the current Combined Development Related fee schedule.

#### **Public Festival**

Public festivals or special events are free and open to the public for five (5) consecutive days or less and utilize temporary structures or electric services.

Festival permits are subject to the Festival fee as defined in the current Combined Development Related fee schedule.

# What Needs a Building Permit and Inspection

- Individual tents or membrane structures greater than 400 square feet
- Tents with side panels grouped in an aggregate area of over 400 square feet without a fire break
- Tents without side panels grouped in an aggregate area of over 700 square feet without a fire break
- Mobile or platform stages with or without stage canopies over 400 square feet
- Other temporary special event structures

# **Exceptions**

- An approval is not required for tents used exclusively for recreational camping purposes
- An approval is not required for any frame or pole tent erected and used only as temporary accessory
  use to a one, two, or three family dwelling; however, this exemption shall not be for any public or
  commercial purpose
- An approval is not required for tents open on all sides which comply with all of the following:
  - o Individual tents having a maximum size of 700 square feet
  - The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total
  - A minimum clearance of 12 feet to all structures and other tents.

# What Needs an Electrical Permit and Inspection

An electrical permit is required when the lighting and power is hard-wired (new service and panel are being installed) or lighting and power are being supplied by vehicle or trailer mounted generator.

- When an electrical permit is required, the electrical contractor must be registered with the City of Columbus.
- Electrical inspections are required for electrical permits.

An electrical permit is **not** required when electric power is plugged into permanently mounted existing exterior GFCI receptacles or connection is made to a small portable generator that does not utilize distribution panels.

Public Festivals that do not feature temporary structures but do require an electrical permit will be required to obtain an electrical permit at the Festival fee prescribed in the current Combined Development Related fee schedule.

# **Application Requirements**

- Site address, parcel number, and event name clearly written on application
- Project description to include set up, tear down, and run dates; number of tents and size of tents over 400 square feet; size and height above ground for stages over 400 square feet; special event structures over 400 square feet
- Event Safety Plan

#### **Documentation Submitted with Application**

- (2) Copies of detailed Site Plan dimensioned to scale to include the following:
  - Boundary of event and property lines
  - Location of tents, stages and other temporary structures with dimensions and use
  - The distances between all existing structures and temporary structures
  - Location of sanitary facilities within 500 feet; show location of portable toilets
  - Location of outdoor seating or standing with indication of fixed seating, tables and chairs
  - Location of fencing to include type, height, gate locations, and method of anchoring
  - Indicate the access and egress for overall event site; indicate location and widths of exits
  - Location of cooking or open flame both outside and inside of tents; tents used for cooking shall be separated from all other tents, canopies and structures by at least 20 feet. Equipment used for cooking shall not be located within 10 feet of an exit or combustible materials.
  - Location and separation of mobile food vendors and any cooking operations
  - Location of all fuel stations; show the location of propane tanks
  - Location of any heaters (electric or fuel)
  - Location of generators with dimensions of separation between tents and the public

Continued: (2) Copies of detailed Site Plan dimensioned to scale to include the following:

- Fire department access within 150 feet
- Indicate 20 foot fire lane to be maintained within the entire event area
- Location of fire hydrants and fire department connections
- Indicate that means of egress (exits) from existing structures are clear during the event
- Indicate evacuation routes
- Indicate limited access when temporary structure is located in a space with limited access such as under a roof or within a courtyard; must verify that adequate egress will be available
- A handicap accessible route to the tent (not required for private events)

# (2) Copies of Construction documents to include:

- Flame resistant certificate for each size of tent / stage canopy
- Manufacturer's specifications and installation instructions for each size of tent and stage
- Structural stability information (If the tent is over 7,500 square feet)
- Stage details for stairs (riser height and tread depth), handrails, and guardrails
- Construction documents prepared by a State of Ohio registered design professional for TSES over 400 square feet including:
  - Construction documents: Construction documents shall be prepared in accordance with the International Building Code by a registered design professional. Construction documents shall include:
    - A summary sheet showing the building code used, design criteria, loads and support reactions
    - Detailed construction and installation drawings.
    - Design calculations.
    - Operating limits of the structure explicitly outlined by the registered design professional including environmental conditions and physical forces.
    - Effects of additive elements such as video walls, supported scenery, audio equipment, vertical and horizontal coverings.
    - Means for adequate stability including specific requirements for guying and cross bracing, ground anchors or ballast for different ground conditions.
  - Designation of responsible party: The owner of the temporary stage canopy shall designate in writing a person to have responsibility for the temporary stage canopy on the site. The designated person shall have sufficient knowledge of the construction documents, manufacturer's recommendations and operations plan to make judgments regarding the structure's safety and to coordinate with the fire code official.
  - Operations plan: The operations plan shall reflect manufacturer's operational guidelines, procedures for environmental monitoring and actions to be taken under specified conditions consistent with the construction documents.

# (2) Copies of tent floor plans to include:

- If there are side panels on the tent indicate where and how many
- Indicate number of exits, exit widths, posted exit signs, and paths of travel
- Illuminated exit signs and egress lighting (not required to be illuminated when event is conducted during daylight hours)
- Proposed occupant load
  - o Provide occupant load calculations

$$occupant\ load = \frac{area\ (in\ square\ feet)}{occupant\ load\ factor}$$

# Occupant Load Factors

- Assembly concentrated use (chairs only, not fixed) = 7
- Assembly un-concentrated use (tables and chairs) = 15
- Assembly standing room only = 5
- o Mercantile = 30
- Seating layout showing number, size, and location of tables; number of chairs; aisle widths per OBC 1018/1030
- Indicate fixed seating, standing room or un-concentrated tables and chairs
- Anchoring locations and information; installer must verify the tie-down is capable of resisting an uplift of at least 10 pounds per square foot of horizontal tent area
- Plans must include a note instructing the occupants to evacuate the tent(s), if necessary, when wind speed meets or exceeds 40 MPH
- Location of fire extinguishers, cooking, heating and electrical equipment
- Size and location of all LP gas equipment and storage containers
- Provide minimum number of exits and exit widths
  - o OFC Table 3103.12.2

Occupant load	Minimum number of means of egress	Minimum width of each means of egress (inches) Tent	Minimum width of each means of egress (inches) Membrane Structure
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1,000 to 1,999	5	120	96
2,000 to 2,999	6	120	96
Over 3,000 <sup>a</sup>	7	120	96

- Indicate minimum number of fire extinguishers and location
  - o OFC Table 906.3(1): Fire extinguishers for Class A fire hazards

	Light (low) hazard occupancy	Ordinary (moderate) hazard occupancy	Extra (high) hazard occupancy
Minimum rated single extinguisher	2-A°	2-A	4-Aª
Maximum floor area per unit of A	3,000 square feet	1,500 square feet	1,000 square feet
Maximum floor area for extinguisher <sup>b</sup>	11,250 square feet	11,250 square feet	11,250 square feet
Maximum distance of travel to extinguisher	75 feet	75 feet	75 feet

# Inspections

It is the responsibility of the permit holder to ensure inspections are requested and performed prior to occupancy or start of the event.

Building and Zoning inspections requested Monday through Friday prior to 4pm will be conducted the next business day. After hours inspection requests should be requested as soon as the inspection date is known to ensure staffing levels. After hour inspection requests must be made prior to 1:30 pm the previous business day.

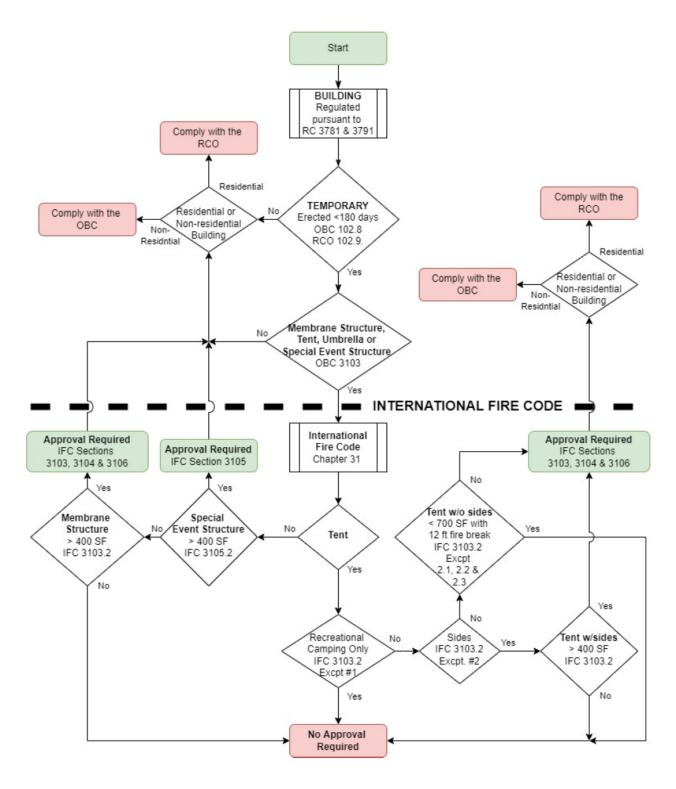
Inspections can be requested on-line at Columbus.gov/inspection or by phone at 614-645-8235.

Special Inspection is required for all temporary special event structure over 400 sq. ft. Platform stages at and under 24" in height are exempt from this requirement.

A special inspection form will need to be filled out showing what type of inspection are needed and by which inspector. The link to the form is here: <a href="https://www.columbus.gov/files/sharedassets/city/v/2/building-and-zoning/special-inspections-temporary-24.pdf">https://www.columbus.gov/files/sharedassets/city/v/2/building-and-zoning/special-inspections-temporary-24.pdf</a>

Special Inspectors must be licensed with Building and Zoning Services. The link for this application is here: https://new.columbus.gov/files/sharedassets/city/v/2/building-and-zoning/document-library/special-inspector-application2024.pdf. The registered engineer or architect who has sealed the drawings for the special event structure can be the special inspector without being licensed.

# **Temporary Structures Approval Flow Chart**



Flow Chart for Permitting and Plan Review (For Reference)