

# COOKING

## DEFINITIONS, GENERAL OVERVIEW and the CODE

Use this section to answer the following questions:

- ... Has a list been developed showing examples of cooking, no open flame ?
- ... Are there any requirements for Type 1 or 2 ventilation hoods ?
- ... Does Chapter 31, IFC address the use of solid flammables like sterno ?

# DEFINITIONS

 **COOKING MEANS TO PREPARE FOOD USING PROCESSES SUCH AS: BOILING, ROASTING, BAKING, BROILING, AND FRYING BY A METHOD OF EXPOSURE TO FLAME OR HEAT THAT PREPARES FOOD SUITABLE FOR CONSUMPTION .**

## MODEL CODE

- THERE IS NO DEFINITION OF COOKING IN THE FIRE, BUILDING OR MECHANICAL MODEL CODES
- COOKING IS COOKING; IT DOESN'T MATTER WHAT TYPE OF DEVICE IS BEING USED

## INDIANA FIRE CODE, 2014 Ed.

- THERE IS A DEFINITION OF COOKING IN THE AMENDMENT TO SEC. 3102.1
- THERE ARE TWO CATEGORIES OF COOKING; OPEN FLAME AND NO OPEN FLAME ( CROCK POT )

**WHAT DOES THE WORD COOKING MEAN ?**

# GENERAL OVERVIEW

## COOKING

**NO OPEN FLAME  
COOKING DEVICES =**



**OPEN FLAME  
COOKING DEVICES =**



# GENERAL OVERVIEW

## THE 3 CODE SECTIONS FOUND IN THE SCOPE

- **OPEN OR EXPOSED FLAME - Sec. 3104.7**

↳ This is talking about the equipment / devices

- **COOKING TENTS - Sec. 3104.15.5**

↳ This pertains to the tent

- **OUTDOOR COOKING - Sec. 3104.15.6**

↳ This is referring to the equipment / devices

# Examples of cooking, no open flame

(crock pot category)

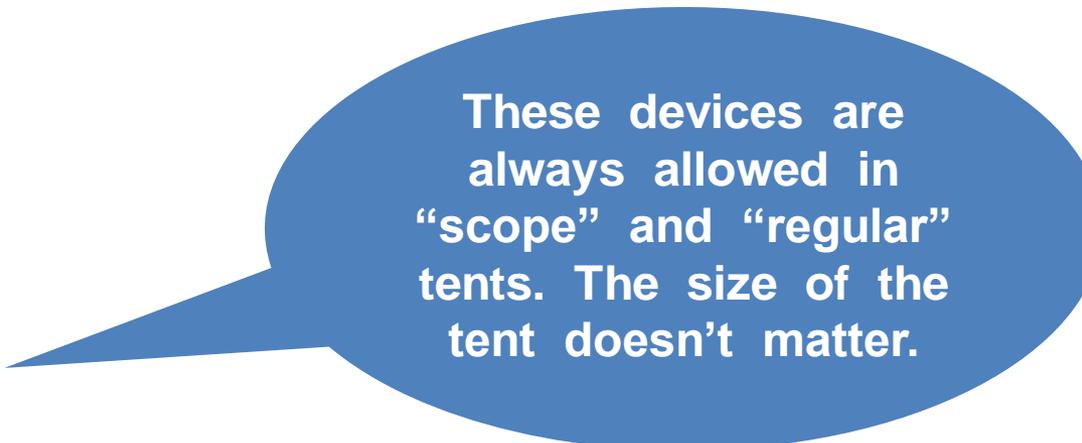
- a. crock pot
- b. electric steam table
- c. sterno steam table
- d. hot dog machine / hot dog warmer
- e. pop corn machine
- f. electric skillet
- g. sterno
- h. coffee pot
- i. kettle corn ( enclosed burner assembly )
- j. electric conveyor belt oven
- k. pizza oven – gas or electric
- l. electric griddle
- m. deep fat fryer ( enclosed burner assembly )
- n. electric “fry – daddy”
- o. micro – wave oven
- p. electric smoker

These devices are always allowed in “scope” and “regular” tents. The size of the tent doesn’t matter.

# Examples of cooking, no open flame

(crock pot category)

c. sterno steam table



These devices are always allowed in “scope” and “regular” tents. The size of the tent doesn't matter.

g. sterno

## **Sec. 3104.15.4 Operations.**

Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard, shall be approved.

# Examples of cooking, with open flame

- a. gas burner
- b. gas range
- c. gas grill
- d. charcoal grill
- e. open wood fire
- f. kettle corn ( open flame burner assembly )
- g. deep fat fryer ( open flame burner assembly )
- h. gas smoker
- i. hardwood smoker

# **GO TO THE 3 HANDOUTS**

**OPEN OR EXPOSED FLAME - Sec. 3104.7**

**COOKING TENTS - Sec. 3104.15.5**

**OUTDOOR COOKING - Sec. 3104.15.6**

# OPEN OR EXPOSED FLAME

**Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )**



**OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE PUBLIC.**

**EXCEPTION: OPEN OR EXPOSED FLAME EQUIPMENT EMITTING FLAME THAT IS VISIBLE DURING THE ORDINARY USE OF THE EQUIPMENT SHALL BE PERMITTED IN TEMPORARY MEMBRANE STRUCTURES OR TENTS HAVING AN AGGREGATE FLOOR AREA OF 400 SQUARE FEET OR LESS. SURFACES SUBJECT TO OIL OR GREASE DEPOSITS SHALL BE CLEANED AT INTERVALS FREQUENTLY ENOUGH TO PREVENT OIL OR GREASE DEPOSITS FROM EXCEEDING A THICKNESS OF TWENTY-FIVE THOUSANDTHS INCH.**

# OPEN OR EXPOSED FLAME

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE  
OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE  
LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE  
OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE  
PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE  
TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE  
PUBLIC.**

# OPEN OR EXPOSED FLAME

## OSFM POLICY # 1 – 3104.7



**OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE PUBLIC.**

**For the purposes of enforcing Sec. 3104.7, the Office of the State Fire Marshal (OSFM) is interpreting the phrase “open to the public” as follows: When a tent is occupied by only the cook staff, wait staff or food / equipment delivery personnel, that tent is not open to the public.**

# OPEN OR EXPOSED FLAME

## OSFM POLICY # 1 – 3104.7, con't.



**OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE PUBLIC.**

**Therefore, when a tent, of any size, is “not open to the public” due to the OSFM policy, Sec. 3104.7 is not enforceable. This means a tent, of any size, may have an unlimited amount of open flame devices under the tent and not violate the Indiana Fire Code. This all changes as soon as the public enters that tent; Sec. 3104.7 becomes enforceable.**

# OPEN OR EXPOSED FLAME

## OSFM POLICY # 2 – 3104.7

 OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE PUBLIC.

For the purposes of enforcing Sec. 3104.7, the text found in this Section, *Open or exposed flame* is referring to open flame or other devices emitting flame. The entire section is referring to this. An understanding of this is important because the word heat is used in the first sentence of the section. The word heat in this case is

# OPEN OR EXPOSED FLAME

## OSFM POLICY # 2 – 3104.7, con't.



**OPEN FLAME OR OTHER DEVICES EMITTING FLAME, FIRE OR HEAT OR ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, GAS, CHARCOAL OR OTHER COOKING DEVICE OR ANY OTHER UNAPPROVED DEVICES SHALL NOT BE PERMITTED INSIDE OR LOCATED WITHIN 10 FEET OF THE TENT OR MEMBRANE STRUCTURES WHILE OPEN TO THE PUBLIC.**

**directly related to and is a result of the open flame. The heat is being produced and is associated with the open flame. An example of a misapplication of this section is the following: using Sec. 3104.7 to regulate an electric skillet and the heat produced. The heat from an electric skillet is not what this section is talking about.**

# OPEN OR EXPOSED FLAME

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**EXCEPTION: OPEN OR EXPOSED FLAME EQUIPMENT  
EMITTING FLAME THAT IS VISIBLE DURING THE  
ORDINARY USE OF THE EQUIPMENT SHALL BE  
PERMITTED IN TEMPORARY MEMBRANE STRUCTURES OR  
TENTS HAVING AN AGGREGATE FLOOR AREA OF 400  
SQUARE FEET OR LESS.**

# OPEN OR EXPOSED FLAME

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**EXCEPTION ( CON'T. ): SURFACES SUBJECT TO OIL OR GREASE DEPOSITS SHALL BE CLEANED AT INTERVALS FREQUENTLY ENOUGH TO PREVENT OIL OR GREASE DEPOSITS FROM EXCEEDING A THICKNESS OF TWENTY-FIVE THOUSANDTHS INCH.**

# OPEN OR EXPOSED FLAME

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**EXCEPTION ( CON'T. ): SURFACES SUBJECT TO OIL OR GREASE DEPOSITS SHALL BE CLEANED AT INTERVALS FREQUENTLY ENOUGH TO PREVENT OIL OR GREASE DEPOSITS FROM EXCEEDING A THICKNESS OF TWENTY-FIVE THOUSANDTHS INCH.**

**THERE ARE NO REQUIREMENTS FOR HOODS**

# COOKING TENTS

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**TENTS WITH SIDEWALLS OR DROPS WHERE  
COOKING IS PERFORMED SHALL BE  
SEPARATED FROM OTHER TENTS OR  
MEMBRANE STRUCTURES BY A MINIMUM OF  
10 FEET.**

# COOKING TENTS

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**TENTS WITH SIDEWALLS OR DROPS WHERE  
COOKING IS PERFORMED SHALL BE  
SEPARATED FROM OTHER TENTS OR  
MEMBRANE STRUCTURES BY A MINIMUM OF  
10 FEET.**

# COOKING TENTS



TENTS WITH SIDEWALLS OR DROPS WHERE COOKING IS PERFORMED SHALL BE SEPARATED FROM OTHER TENTS OR MEMBRANE STRUCTURES BY A MINIMUM OF 10 FEET.

- GO BACK TO THE DEFINITION OF COOKING AND REFRESH YOUR MEMORY; SEC. 3102.1, AMENDMENT
- BECAUSE OF THIS, THE WORD “COOKING” APPLIES TO BOTH OF OUR COOKING CATEGORIES
- THEREFORE, BOTH OPEN FLAME AND NO OPEN FLAME (CROCK POT) CATEGORY HAS TO MEET THIS SECTION



**WHAT DOES THE WORD “COOKING” MEAN ?**

# COOKING TENTS

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**TENTS WITH SIDEWALLS OR DROPS WHERE  
COOKING IS PERFORMED SHALL BE  
SEPARATED FROM OTHER TENTS OR  
MEMBRANE STRUCTURES BY A MINIMUM OF  
10 FEET.**

# THIS TENT HAS NO SIDEWALLS OR DROPS



# COOKING TENTS



NOTE: the two types of cooking will be added and studied in the next couple of sections.

■ BECAUSE THIS TENT HAS NO SIDEWALLS OR DROPS, THIS SECTION DOES NOT APPLY

**SEC. 3104.15.5 IS NOT ENFORCEABLE ON THIS TENT**

# COOKING TENTS



**TENTS WITH SIDEWALLS OR DROPS WHERE COOKING IS PERFORMED SHALL BE SEPARATED FROM OTHER TENTS OR MEMBRANE STRUCTURES BY A MINIMUM OF 10 FEET.**

- **THE PROPONENT OF THE CHANGE WAS DANIEL NICHOLS, NEW YORK STATE DIVISION OF CODE ...**
- **HIS HOPE WAS TO ALLOW TENTS WITH ONLY A TOP TO BE PLACED SIDE BY SIDE WITH NO SEPARATION**
- **WHICH CREATES A CONTINUOUS COVER FROM THE “FOOD PREP” TENT ALL THE WAY TO THE “EATING AREA” TENT**

**FIRST, WE HAVE TO UNDERSTAND WHY THIS CODE SECTION WAS CHANGED IN THE MODEL CODE.**

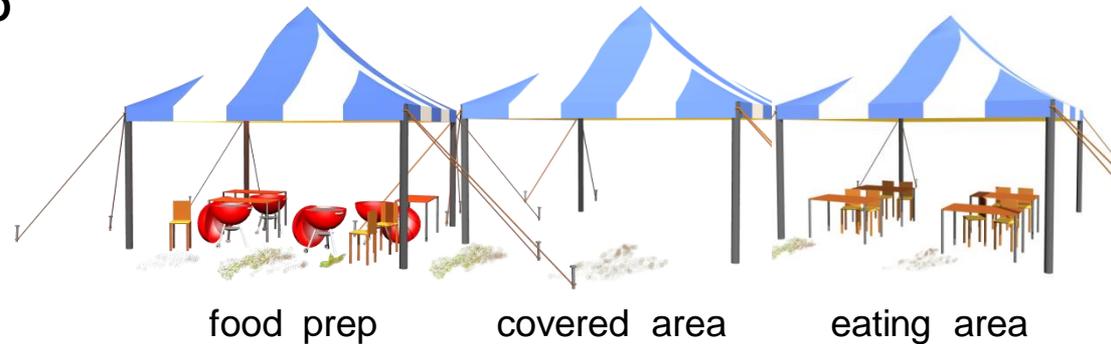
**WHY IS THIS SECTION WRITTEN THIS WAY ?**

# COOKING TENTS



**TENTS WITH SIDEWALLS OR DROPS WHERE COOKING IS PERFORMED SHALL BE SEPARATED FROM OTHER TENTS OR MEMBRANE STRUCTURES BY A MINIMUM OF 10 FEET.**

- **IN THE MODEL CODE, THIS IS WHAT DANIEL NICHOLS WAS TRYING TO ACHIEVE**
- **BECAUSE THESE TENTS DO NOT HAVE SIDEWALLS OR DROPS, THIS CODE SECTION IS SILENT**
- **WHICH MEANS, THESE TENTS ARE ALLOWED TO BE PLACED SIDE BY SIDE; THERE IS NO SEPARATION DISTANCE**



**THIS WAS THE GOAL OF THE CODE CHANGE IN THE MODEL CODE**

# COOKING TENTS



**TENTS WITH SIDEWALLS OR DROPS WHERE COOKING IS PERFORMED SHALL BE SEPARATED FROM OTHER TENTS OR MEMBRANE STRUCTURES BY A MINIMUM OF 10 FEET.**

- FOR A “SCOPE” TENT ( WITH NO SIDEWALLS OR DROPS ) AND OPEN FLAME COOKING INSIDE THE TENT
- SECTION 3104.15.5, COOKING TENTS IS SILENT, BUT SECTION 3104.7, EXCEPTION, IS APPLICABLE
- THE AGGREGATE AREA CONCEPT IS FOUND IN THIS EXCEPTION AND CAUSES A SEPARATION DISTANCE FOR THE TENT WITH THE OPEN FLAME COOKING

**BUT IN INDIANA, THE RESULT IS DIFFERENT THAN EXPECTED BECAUSE OF OUR AMENDMENTS.**

**THE GOAL OF THE MODEL CODE CHANGE CAN'T BE ACHIEVED**

# OPEN OR EXPOSED FLAME

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**EXCEPTION: OPEN OR EXPOSED FLAME EQUIPMENT  
EMITTING FLAME THAT IS VISIBLE DURING THE  
ORDINARY USE OF THE EQUIPMENT SHALL BE  
PERMITTED IN TEMPORARY MEMBRANE STRUCTURES OR  
TENTS HAVING AN AGGREGATE FLOOR AREA OF 400  
SQUARE FEET OR LESS.**

# AGGREGATE FLOOR AREA



**EXCEPTION: OPEN OR EXPOSED FLAME EQUIPMENT EMITTING FLAME ... SHALL BE PERMITTED IN ... HAVING AN AGGREGATE FLOOR AREA OF 400 SQUARE FEET OR LESS - SEC. 3104.7.**

- THIS IS NOT A DEFINED TERM
- MULTIPLE TENTS PLACED SIDE BY SIDE
- WITHOUT A SEPARATION OF 10 FEET

WE ARE TALKING ABOUT A GROUP OF TENTS WITH OPEN OR EXPOSED FLAME EQUIPMENT INSIDE.

**NOTE : THE 10 FOOT SEPARATION DISTANCE IS FROM THE INDIANA AMENDMENTS. THIS IS A CONSISTENT MEASUREMENT FOUND IN THE 3 SECTIONS DEALING WITH COOKING.**

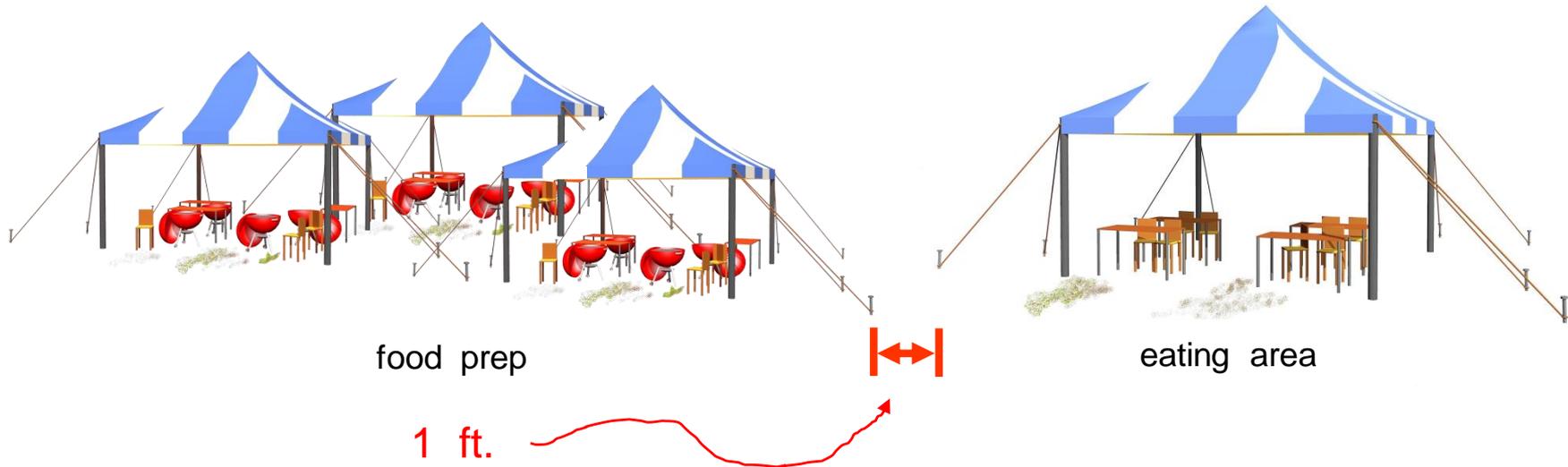
# AGGREGATE FLOOR AREA



## EXAMPLE 1

All of these tents  
are open to the public

- In this group on the left, there are 3 individual tents, each one is 132 sq. ft.
- The separation distance between each tent = 0 feet.
- This group of tents has an aggregate floor area of 396 sq. ft.
- The Fair Board wants to place a 400 sq. ft. “eating area” tent 1 foot away from the “food prep” tents.



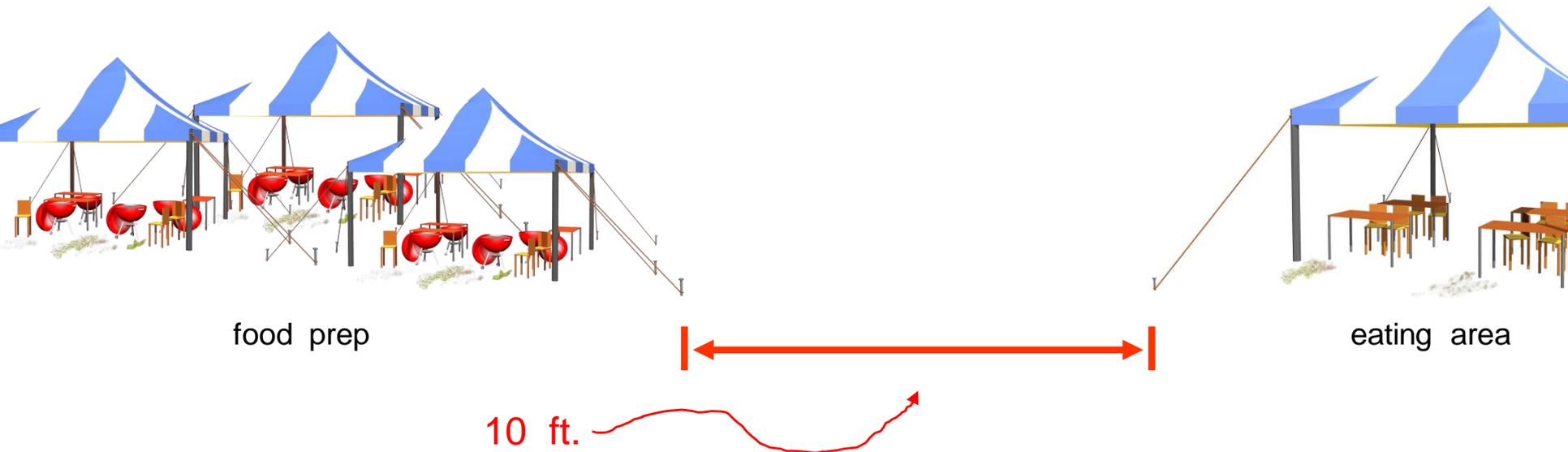
**THIS IS A VIOLATION OF THE AGGREGATE FLOOR AREA  
CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 1 - SOLUTION

All of these tents  
are open to the public

- Create a separation distance of 10 feet between the “food prep” tents on the left and the “eating area” tent.
- The aggregate area of the “food prep” tents is 396 sq. ft.
- The area of the “eating area” tent is 400 sq. ft.



**THESE 4 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

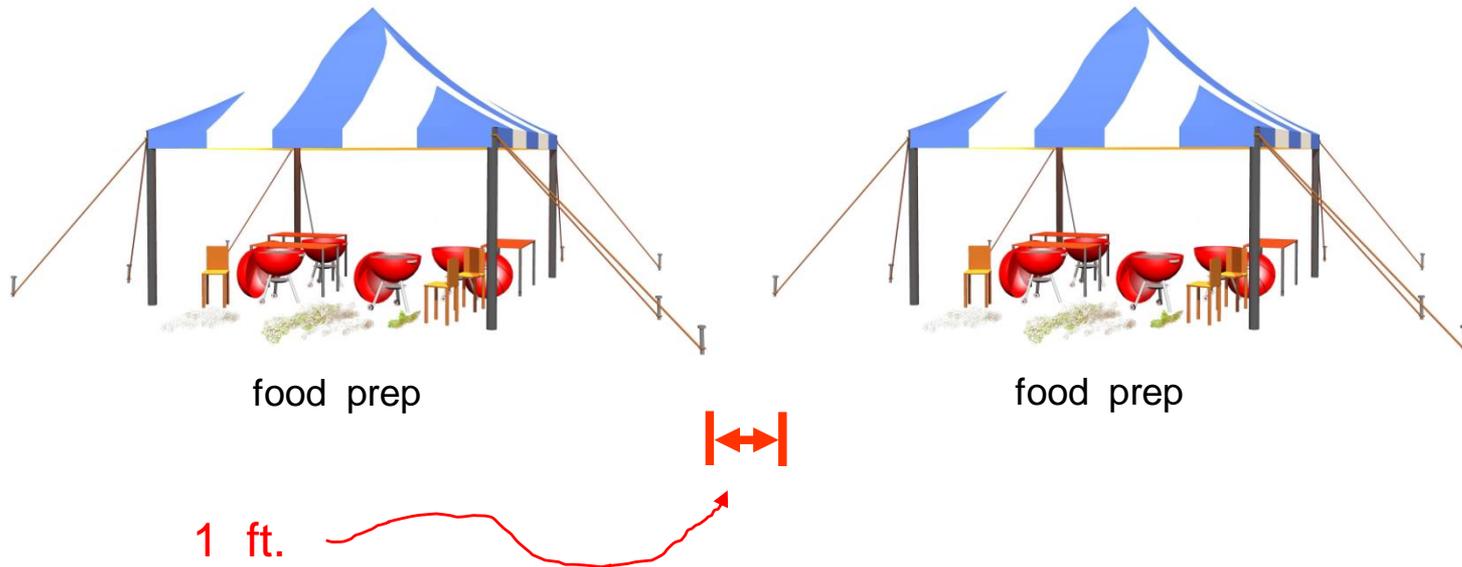
# AGGREGATE FLOOR AREA



## EXAMPLE 2

All of these tents  
are open to the public

- There are 2 individual tents, each one is 400 sq. ft.
- The separation distance between each tent = 1 foot.
- This group of tents has an aggregate floor area of 800 sq. ft. because the distance between them is not 10 feet.



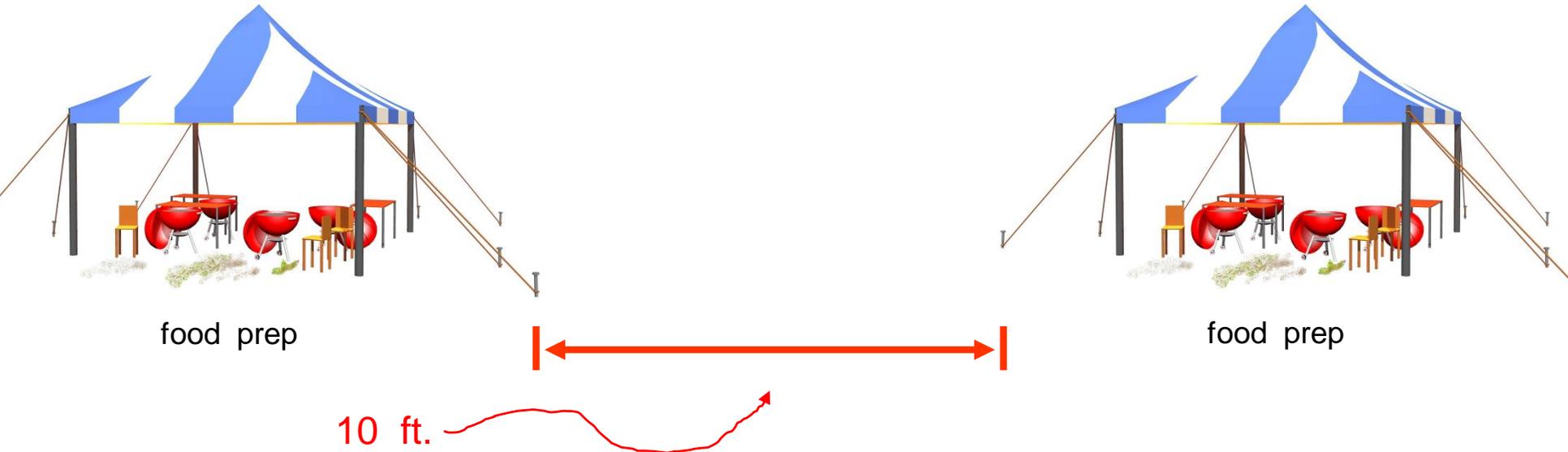
**THIS IS A VIOLATION OF THE AGGREGATE FLOOR AREA  
CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 2 - SOLUTION

All of these tents  
are open to the public

- Create a separation distance of 10 feet between the tents.
- There are now 2 individual tents, each one is 400 sq. ft.



**THESE 2 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

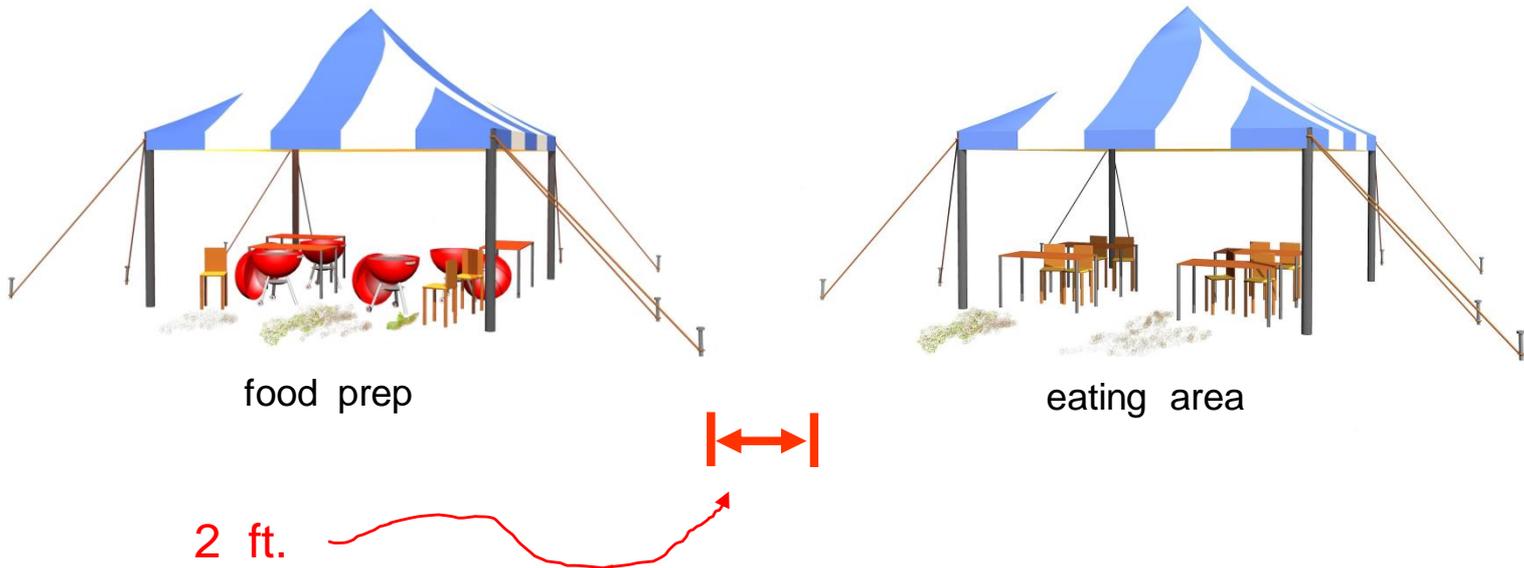
# AGGREGATE FLOOR AREA



## EXAMPLE 3

All of these tents  
are open to the public

- There are 2 individual tents, each one is 400 sq. ft.
- The separation distance between each tent = 2 feet.
- This group of tents has an aggregate floor area of 800 sq. ft. because the distance between them is not 10 feet.



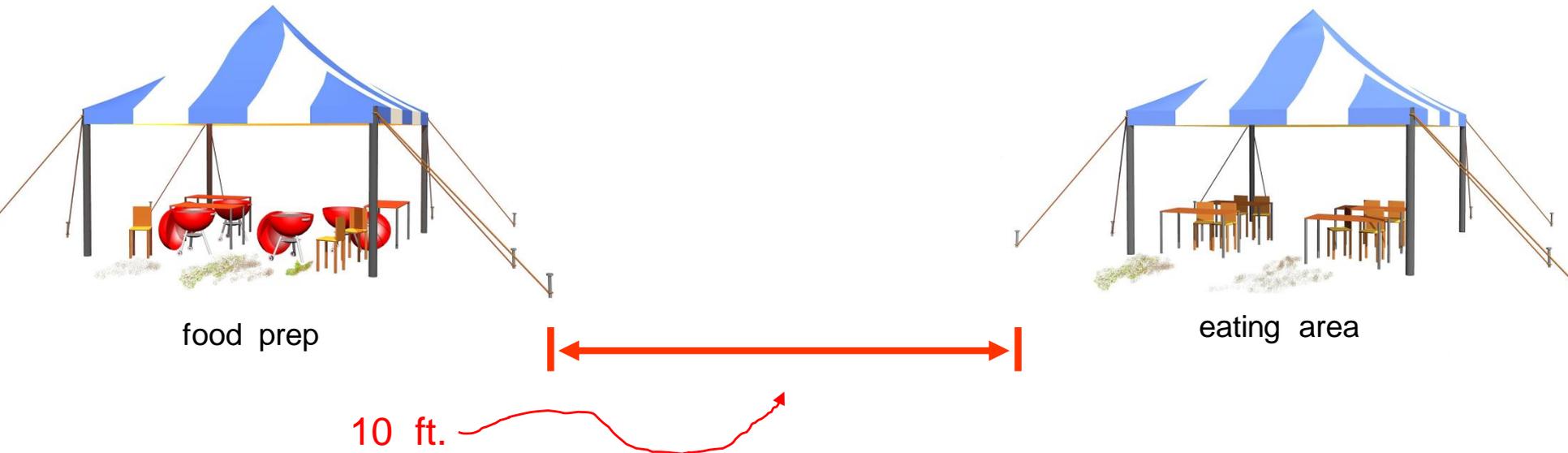
**THIS IS A VIOLATION OF THE AGGREGATE FLOOR AREA  
CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 3 - SOLUTION

All of these tents  
are open to the public

- Create a separation distance of 10 feet between the tents.
- There are now 2 individual tents, each one is 400 sq. ft.



**THESE 2 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA



## EXAMPLE 4

All of these tents  
are open to the public

- There are 3 individual tents, each one is 400 sq. ft.
- The separation distance between each tent = 1 foot.
- This group of tents has an aggregate floor area of 1200 sq. ft. because the distance between them is not 10 feet.



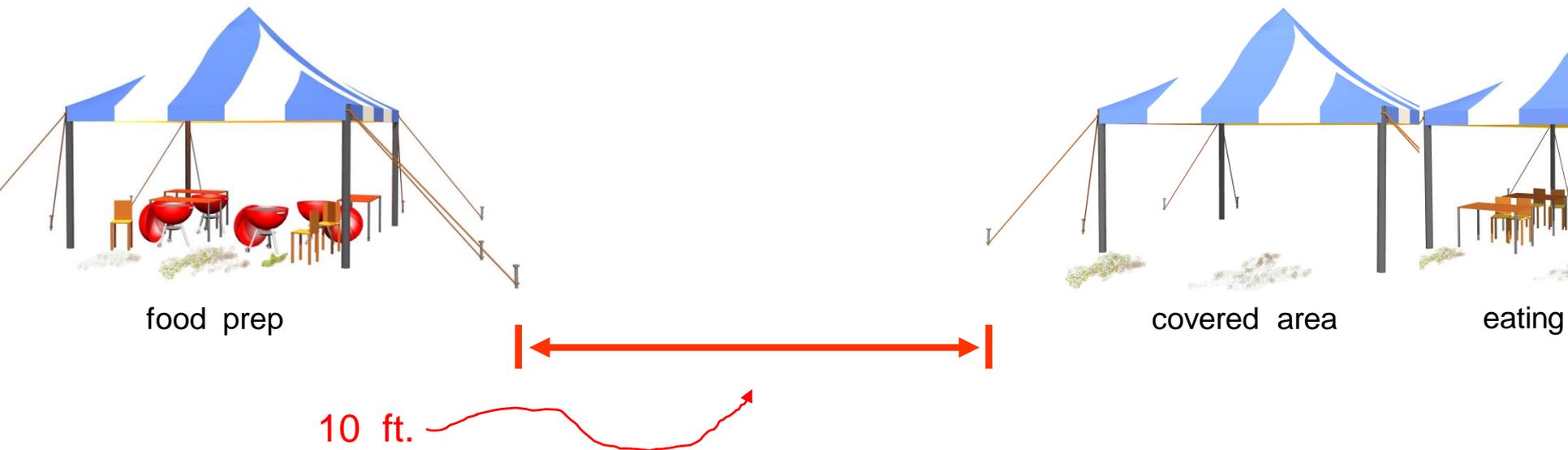
**THIS IS A VIOLATION OF THE AGGREGATE FLOOR AREA  
CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 4 - SOLUTION

All of these tents  
are open to the public

- Create a separation distance of 10 feet between the “food prep” tent on the left and the “covered area” tent.
- There is now 1 tent for the “food prep”, 400 sq. ft. in size and a group of 2 tents not containing open or exposed flame equipment.



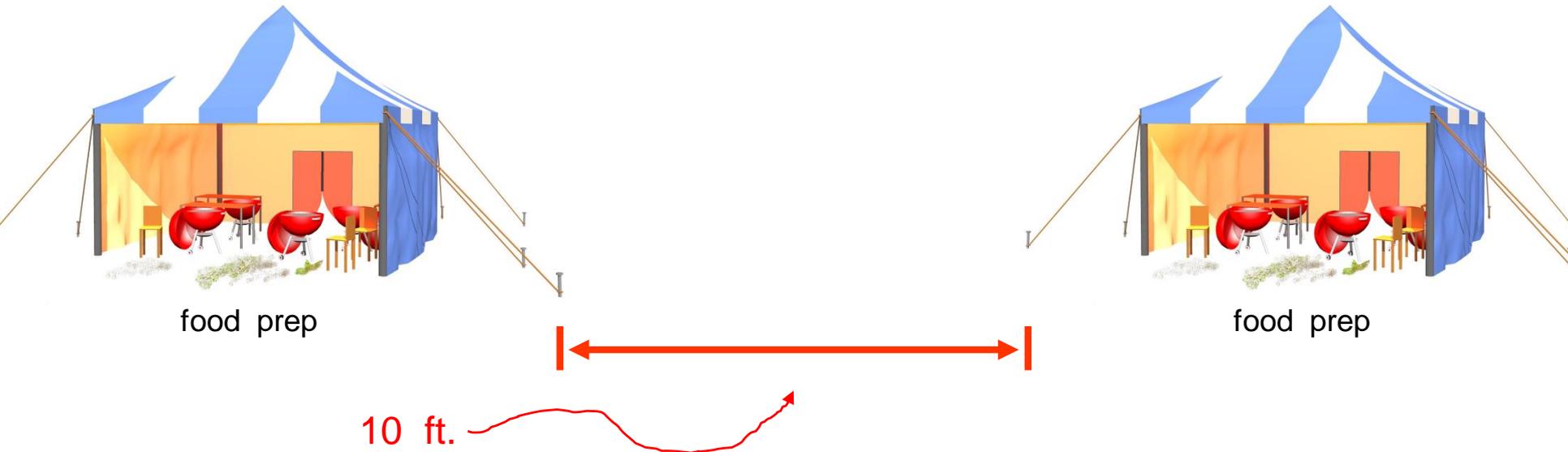
**THESE 3 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 5

All of these tents  
are open to the public

- There are 2 individual tents, each one is 400 sq. ft.
- The separation distance between each tent = 10 feet due to Sec. 3104.15.5.
- This example meets both code sections; 3104.7 and 3104.15.5.



**THESE 2 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

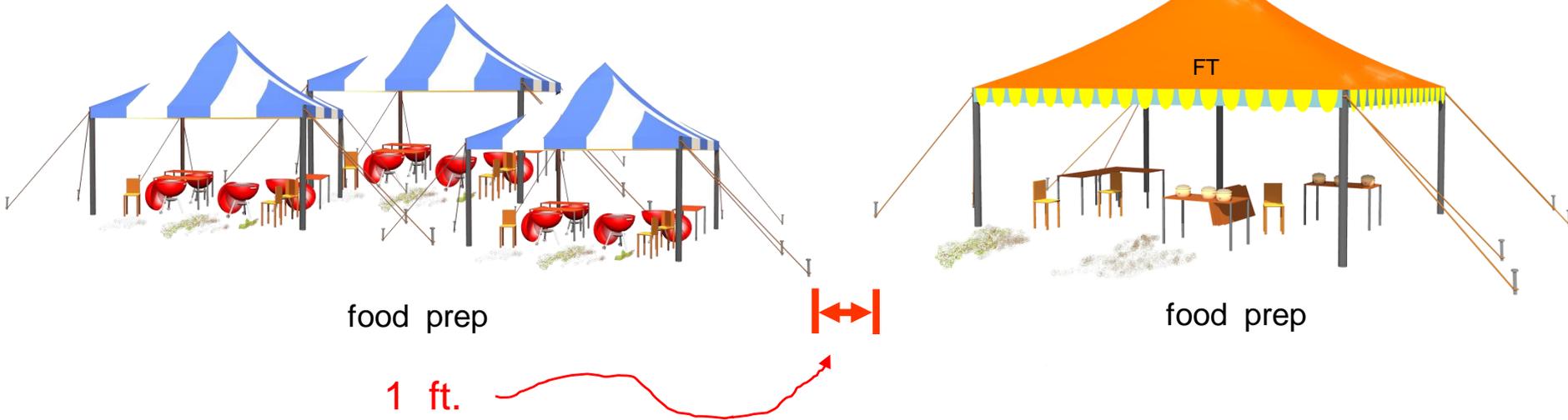
# AGGREGATE FLOOR AREA



## EXAMPLE 6

All of these tents  
are open to the public

- In this group on the left, there are 3 individual tents, each one is 132 sq. ft.
- The separation distance between each tent = 0 feet.
- This group of tents on the left has an aggregate floor area of 396 sq. ft.
- The Fair Board wants to place a 616 sq. ft. “food prep” tent 1 foot away from the “food prep” tents on the left.



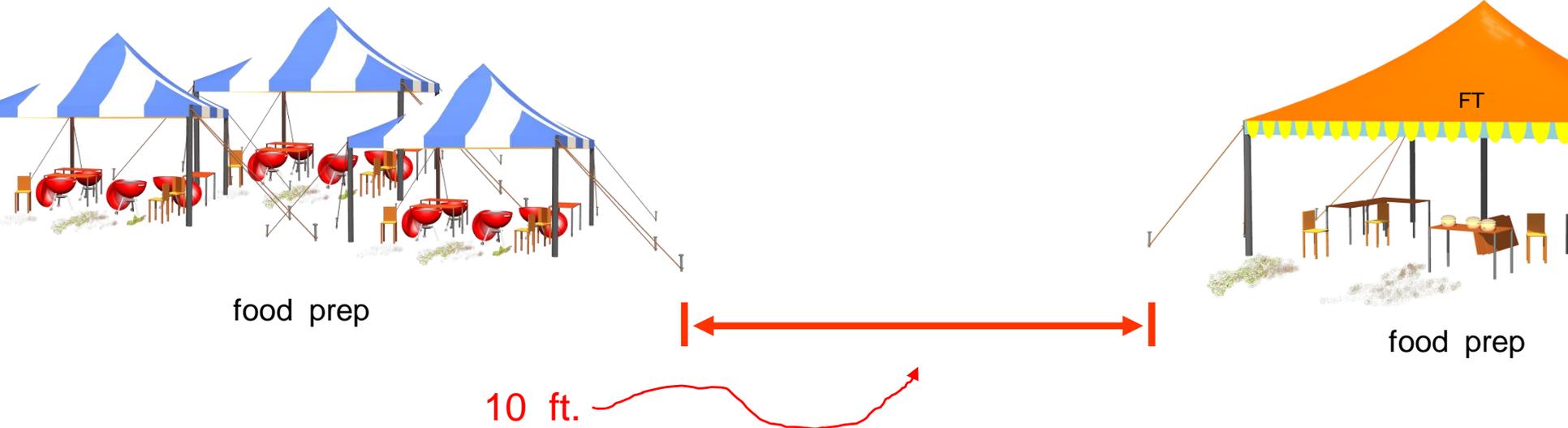
**THIS IS A VIOLATION OF THE AGGREGATE FLOOR AREA  
CONCEPT AND SEC. 3104.7, EXCEPTION**

# AGGREGATE FLOOR AREA

## EXAMPLE 6 - SOLUTION

All of these tents  
are open to the public

- Create a separation distance of 10 feet between the “food prep” tents on the left and the “food prep” tent on the right.
- The aggregate area of the “food prep” tents on the left is 396 sq. ft.
- The area of the “food prep” tent on the right is 616 sq. ft.



**THESE 4 TENTS MEET THE AGGREGATE FLOOR  
AREA CONCEPT AND SEC. 3104.7, EXCEPTION**

# OUTDOOR COOKING

Amendment; LSA Doc. # 13 - 341 ( F )  
675 IAC 22 - 2.5 ( eff. 12 - 01 - 14 )



**OUTDOOR COOKING THAT PRODUCES SPARKS  
OR GREASE-LADEN VAPORS SHALL NOT BE  
PERFORMED WITHIN 10 FEET OF A TENT OR  
MEMBRANE STRUCTURE.**

# Am I allowed under my to COOK ?



2 categories of cooking :



There is no flame visible during the ordinary use of this equipment.



There is a flame visible during the ordinary use of this equipment.

Do you mean with a crock pot, micro - wave oven, electric skillet, etc. ? **or** Do you mean with a gas grill, charcoal grill, open wood fire, etc. ?

crock pot category

open flame category



turn over for answer

# Am I allowed to cook under my ?



Yes

These cooking devices are always allowed in "scope" tents



Yes

These cooking devices are always allowed in "regular" tents



Yes

These cooking devices are always allowed in "regular" tents



Yes

These cooking devices are allowed in "scope" tents. See the exception in Sec. 3104.7



No

15,000



No



**Chapter 31, 2014 Ed.  
Indiana Fire Code**

**Tents And Other Membrane Structures**

**Presented by the State Fire Marshal's Office**

**Division of Fire and Building Safety**