



# EXIT SIGNS

Use this section to answer the following questions:

- ... Are the requirements found in Sec. 3103.12.6, *Exit Signs*, applicable to a tent 400 sq. ft. or less ?
- ... Are exit signs required in a tent in excess of 400 sq. ft. when an exit serves 50 or more ?
- ... May exit signs be internally illuminated in accordance with UL 924 ?

## EXIT SIGNS



**EXITS SHALL BE CLEARLY MARKED.**

**EXIT SIGNS SHALL BE INSTALLED AT REQUIRED EXIT DOORWAYS AND WHERE OTHERWISE NECESSARY TO INDICATE CLEARLY THE DIRECTION OF EGRESS WHEN THE EXIT SERVES AN OCCUPANT LOAD OF 50 OR MORE.**

# EXIT SIGN ILLUMINATION

## 300 OR LESS OCCUPANTS

### **Internally illuminated**

**Listed and labeled in accordance with UL 924. This UL Standard provides for a minimum of 90 minutes of luminosity upon loss of normal power.**

**( also see Section 1011.5, *Internally Illuminated Exit Signs*, IFC, 2014 ed. )**

### **Externally illuminated**

**By luminaires supplied by two separate circuits, one of which shall be separate from all other circuits.**

# EXIT SIGN ILLUMINATION

## IN EXCESS OF 300 OCCUPANTS

### Internally illuminated

Listed and labeled in accordance with UL 924. This UL Standard provides for a minimum of 90 minutes of luminosity upon loss of normal power.

( also see Section 1011.5, *Internally Illuminated Exit Signs*, IFC, 2014 ed. )

### Externally illuminated

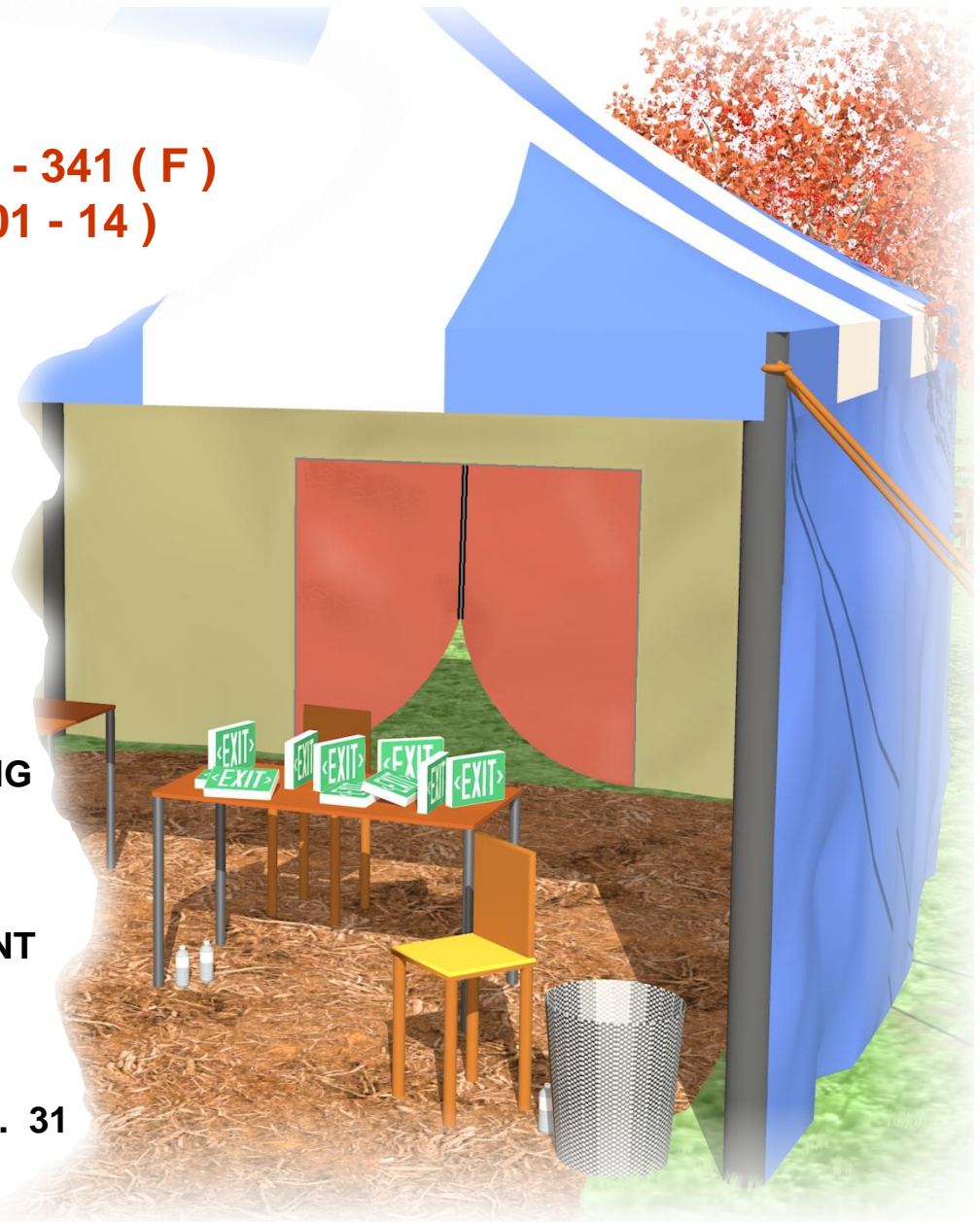
By luminaires supplied by two separate sources of power, one of which shall be an approved emergency system. The emergency system shall be supplied from storage batteries or from the on-site generator set. The emergency system shall have a minimum duration of 90 minutes when operated at full design demand.

( also see Section 1011.6.2, *Exit Sign Illumination*, IFC, 2014 ed. )

# EXIT SIGNS

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

- **THIS SCENARIO IS A “SCOPE” TENT; 400 SQ. FT. OR LESS**
- **WITH AN ACTIVITY INSIDE THE TENT OTHER THAN OPEN OR EXPOSED FLAME AND / OR COOKING**
- **DUE TO THE SIZE OF THIS TENT AND THE ACTIVITY INSIDE THE TENT**
- **THE *SCOPE* IS THE ONLY APPLICABLE CODE SECTION IN CH. 31**



# EXIT SIGNS

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

- THE 3 CODE SECTIONS AMENDED IN THE *SCOPE* ARE 3104.7, 3104.15.5 AND 3104.15.6
- THESE 3 CODE SECTIONS PERTAIN TO OPEN OR EXPOSED FLAME AND / OR COOKING
- THE REQUIREMENT FOR EXIT SIGNS IN THIS TENT HAS NOTHING TO DO WITH OPEN FLAME, ETC., THEREFORE,
- DUE TO THE WAY THE *SCOPE* HAS BEEN WRITTEN, THIS TENT DOES **NOT** HAVE TO MEET ANYTHING IN CH. 31





# EXIT SIGNS

## “Scope” Tents

- DUE TO THE *SCOPE*, THIS TENT DOES **NOT** HAVE TO MEET SEC. 3103.12.6, *EXIT SIGNS*
- THIS SLIDE ALSO PERTAINS TO THE REQUIREMENTS FOUND IN SEC. 3103.12.6.1, *EXIT SIGN ILLUMINATION*
- THE REMOVAL OF THE SIDEWALLS OR DROPS DOES **NOT** CHANGE HOW THIS SCENARIO IS HANDLED



# **SUMMARY:** the following code sections govern this scenario

## ■ **Sec. 3101.1 – Scope**

THIS IS THE ONLY CODE  
SECTION THAT APPLIES IN CH. 31.



EXIT SIGNS IN  
A "SCOPE" TENT



# EXIT SIGNS

## “Regular” tents without sidewalls

- THIS SCENARIO IS A “REGULAR” TENT; IN EXCESS OF 400 SQ. FT.
- WITH CHAIRS AND A LECTERN INSIDE THE TENT
- DUE TO THE SIZE OF THIS TENT, ALL OF CHAPTER 31 IS APPLICABLE
- THEREFORE, SECTION 3103.12.6, *EXIT SIGNS*, APPLIES



## “Regular” tents without sidewalls

■ In this scenario, exit signs are not required. Study the text of Sec. 3103.12.6 piece by piece.

- 1) *Exits shall be clearly marked:* this tent is one big exit.
- 2) *Exit signs shall be installed at required exit doorways, and:* there are no exit doorways.
- 3) *where otherwise necessary to indicate clearly the direction of egress when the exit serves an occupant load of 50 or more.* Even with a square footage that would equate to an occupant load of 50 or more, the direction of egress is clear.

con't. on the next slide



## “Regular” tents without sidewalls

- There could be instances where the direction of egress is not clear due to the activity in the tent, stock, displays and tables. In these cases, the Inspection Division, OSFM, will assess the situation and make a determination if exit signs are required.

Based upon this picture and the requirements found in Sec. 3103.12.6, exit signs are not required.

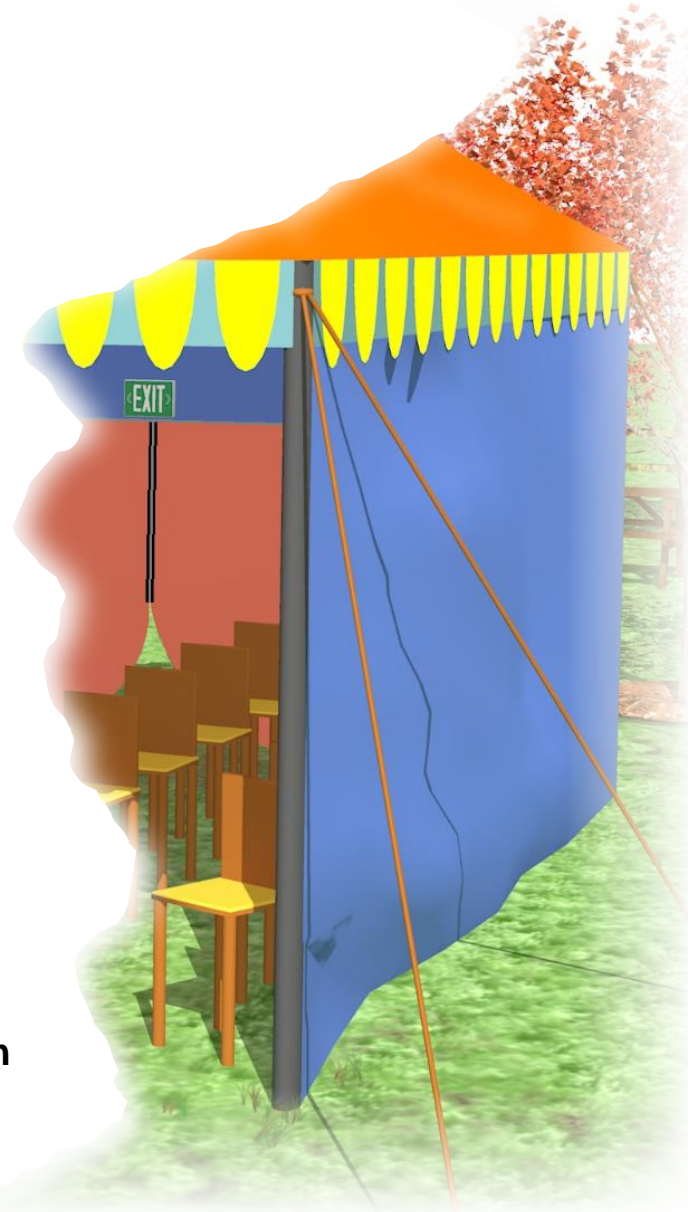




# EXIT SIGNS

## “Regular” tents with sidewalls

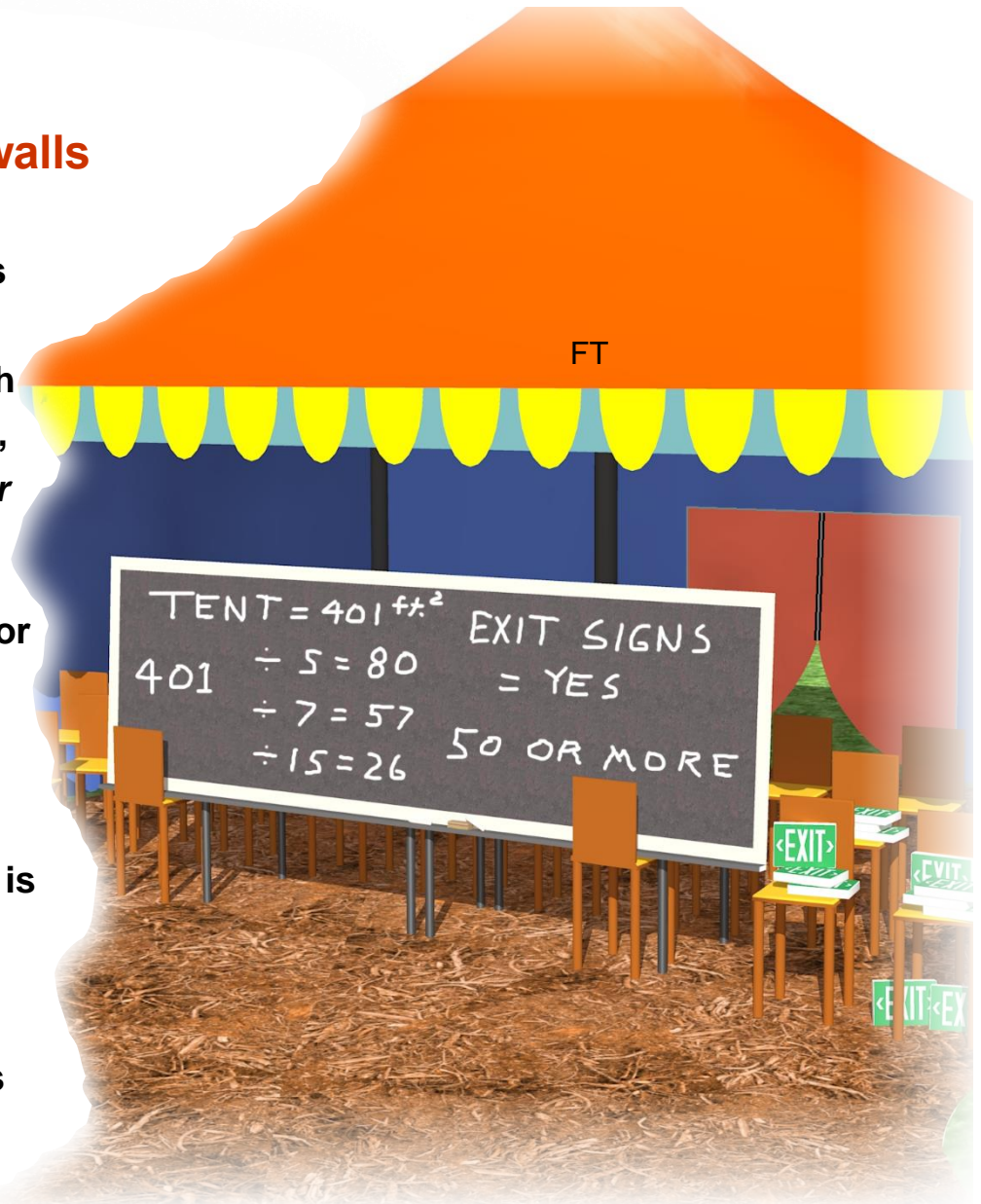
- When sidewalls or drops are used, things change a bit. Study the text of Sec. 3103.12.6 piece by piece.
  - 1) *Exits shall be clearly marked:* the exit opening in the rear is covered by a curtain which is a color which contrasts with the color of the tent.
  - 2) *Exit signs shall be installed at required exit doorways, and:* there are no exit doorways. Everyone will agree there is an exit opening in the rear of the tent, however, this is not a doorway.
  - 3) *where otherwise necessary to indicate clearly the direction of egress when the exit serves an occupant load of 50 or more.* This is described in detail on the next slide.



# EXIT SIGNS

## “Regular” tents with sidewalls

- When the size of a “regular” tent is between 401 and 749 sq. ft., the answer changes depending on which value is chosen from Table 1004.1.2, *Maximum Floor Area Allowances Per Occupant*.
- If an “Occupant Load Factor” of 5 or 7 is used for this range of sq. ft., exit signs are always required.
- However, when a factor of 15 (unconcentrated, tables and chairs) is used for this range of sq. ft., exit signs are not required.
- When the size of a “regular” tent is 750 sq. ft. or larger, exit signs are always required.

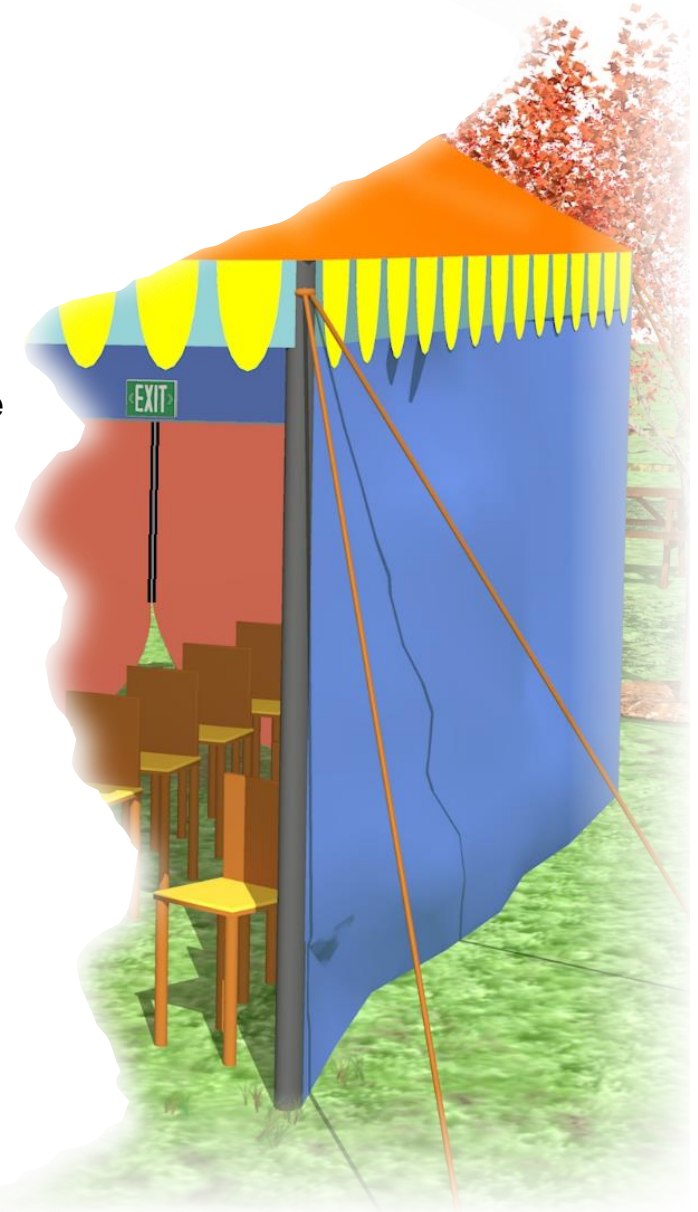




## “Regular” tents with sidewalls

- In summary for the tent shown, which is 401 sq. ft., one exit sign is required above the exit opening in the rear when a factor of 5 or 7 is used from Table 1004.1.2, *Maximum Floor Area Allowances Per Occupant*.

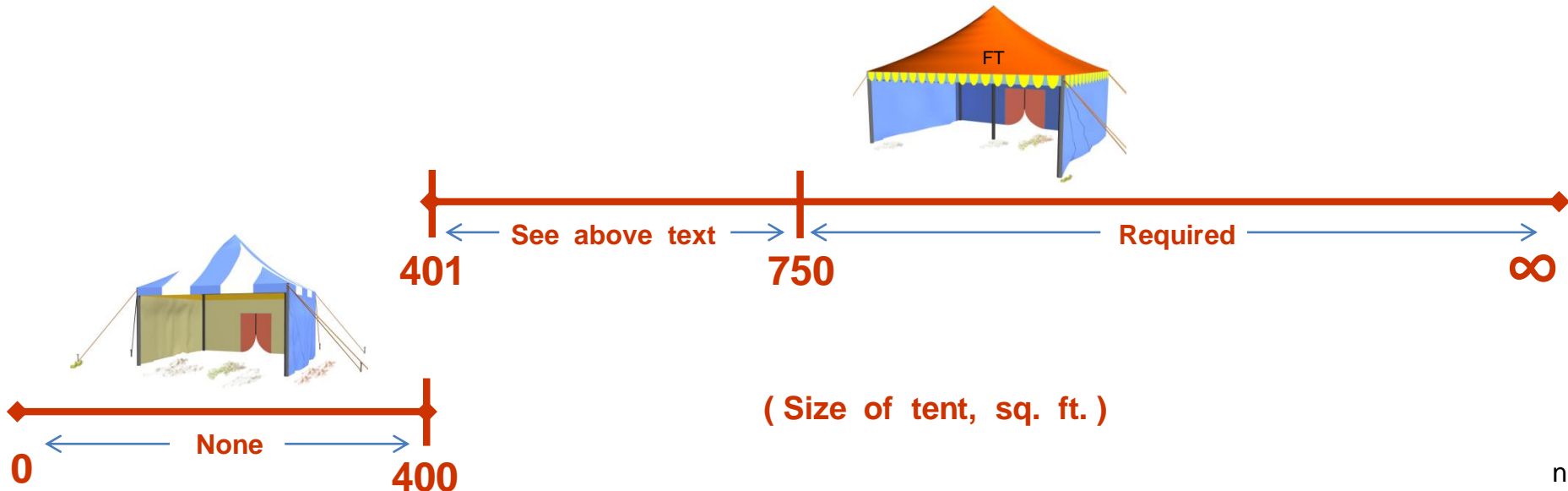
There would not be a sign required at the front of the tent based upon the discussion in the previous slides.



# EXIT SIGNS

## Required ?

- “Scope” tent - no
- “Regular” tent without sidewalls or drops - no, unless the direction of egress is unclear
- “Regular” tent with sidewalls or drops between 401 and 749 sq. ft. - depends on which “Occupant Load Factor” is chosen from Table 1004.1.2:  
5 = yes      7 = yes      15 = no
- “Regular” tent with sidewalls or drops 750 sq. ft. or larger - yes



# **SUMMARY:** the following code sections govern this scenario

## ■ Sec. 3101.1 – Scope

## ■ Sec. 3103.12.6 – Exit signs

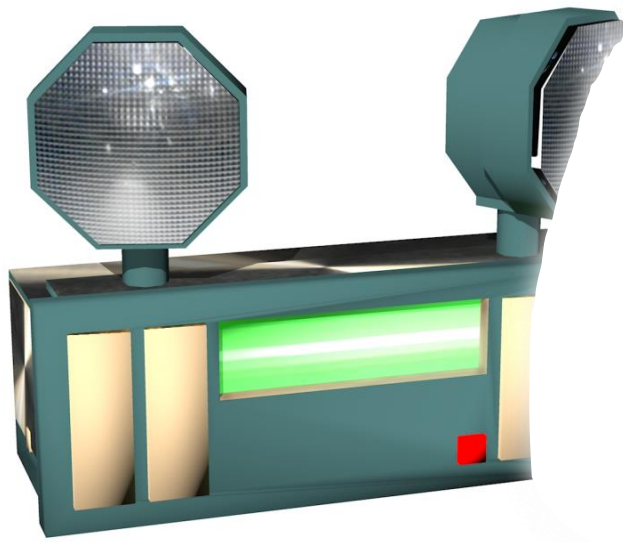
└─▶ Applicable to this scenario.

## ■ Sec. 3103.12.6.1 – Exit sign illumination

└─▶ Applicable to this scenario.



EXIT SIGNS IN  
A "REGULAR" TENT




# MEANS OF EGRESS ILLUMINATION

Use this section to answer the following questions:

- ... Are the requirements found in Sec. 3103.12.7, *Means of Egress Illumination*, applicable to a tent 400 sq. ft. or less ?
- ... For a tent in excess of 400 sq. ft., was this section amended so it would parallel exit signs ?
- ... For a 700 sq. ft. tent, if exit signs are required, is means of egress illumination required ?

## MEANS OF EGRESS ILLUMINATION

 **MEANS OF EGRESS ILLUMINATION SHALL BE INSTALLED AT REQUIRED EXIT DOORWAYS AND WHERE OTHERWISE NECESSARY TO INDICATE CLEARLY THE DIRECTION OF EGRESS WHEN THE EXIT SERVES AN OCCUPANT LOAD OF FIFTY (50) OR MORE. MEANS OF .....**

**CON'T.**



## MEANS OF EGRESS ILLUMINATION



**MEANS OF EGRESS SHALL BE ILLUMINATED WITH LIGHT  
HAVING AN INTENSITY OF NOT LESS THAN ONE  
FOOTCANDLE AT FLOOR LEVEL WHILE THE STRUCTURE  
IS OCCUPIED. FIXTURES REQUIRED FOR MEANS OF  
EGRESS ILLUMINATION SHALL BE SUPPLIED FROM A  
SEPARATE CIRCUIT OR SOURCE OF POWER.**

# MEANS OF EGRESS ILLUMINATION

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

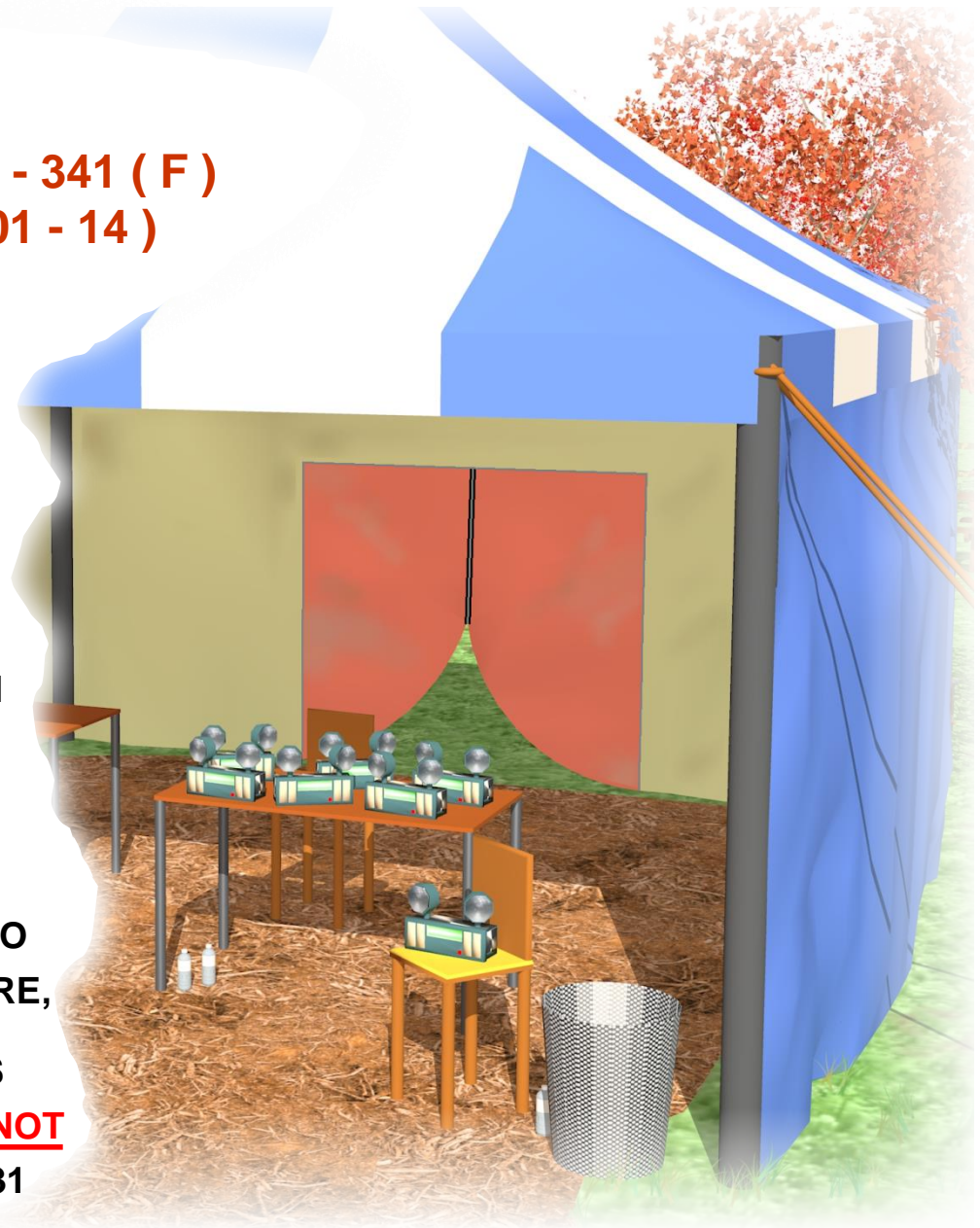
- **THIS SCENARIO IS A “SCOPE” TENT; 400 SQ. FT. OR LESS**
- **WITH AN ACTIVITY INSIDE THE TENT OTHER THAN OPEN OR EXPOSED FLAME AND / OR COOKING**
- **DUE TO THE SIZE OF THIS TENT AND THE ACTIVITY INSIDE THE TENT**
- **THE *SCOPE* IS THE ONLY APPLICABLE CODE SECTION IN CH. 31**



# MEANS OF EGRESS ILLUMINATION

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

- THE 3 CODE SECTIONS AMENDED IN THE *SCOPE* ARE 3104.7, 3104.15.5 AND 3104.15.6
- THESE 3 CODE SECTIONS PERTAIN TO OPEN OR EXPOSED FLAME AND / OR COOKING
- THE REQUIREMENT FOR EGRESS ILLUMINATION HAS NOTHING TO DO WITH OPEN FLAME, ETC., THEREFORE,
- DUE TO THE WAY THE *SCOPE* HAS BEEN WRITTEN, THIS TENT DOES **NOT** HAVE TO MEET ANYTHING IN CH. 31





# MEANS OF EGRESS ILLUMINATION

## “Scope” Tents

- DUE TO THE *SCOPE*, THIS TENT DOES **NOT** HAVE TO MEET SEC. 3103.12.7, *MEANS OF EGRESS ILLUMINATION*
- THE REMOVAL OF THE SIDEWALLS OR DROPS DOES **NOT** CHANGE HOW THIS SCENARIO IS HANDLED



# **SUMMARY:** the following code sections govern this scenario

## ■ **Sec. 3101.1 – Scope**

THIS IS THE ONLY CODE  
SECTION THAT APPLIES IN CH. 31.



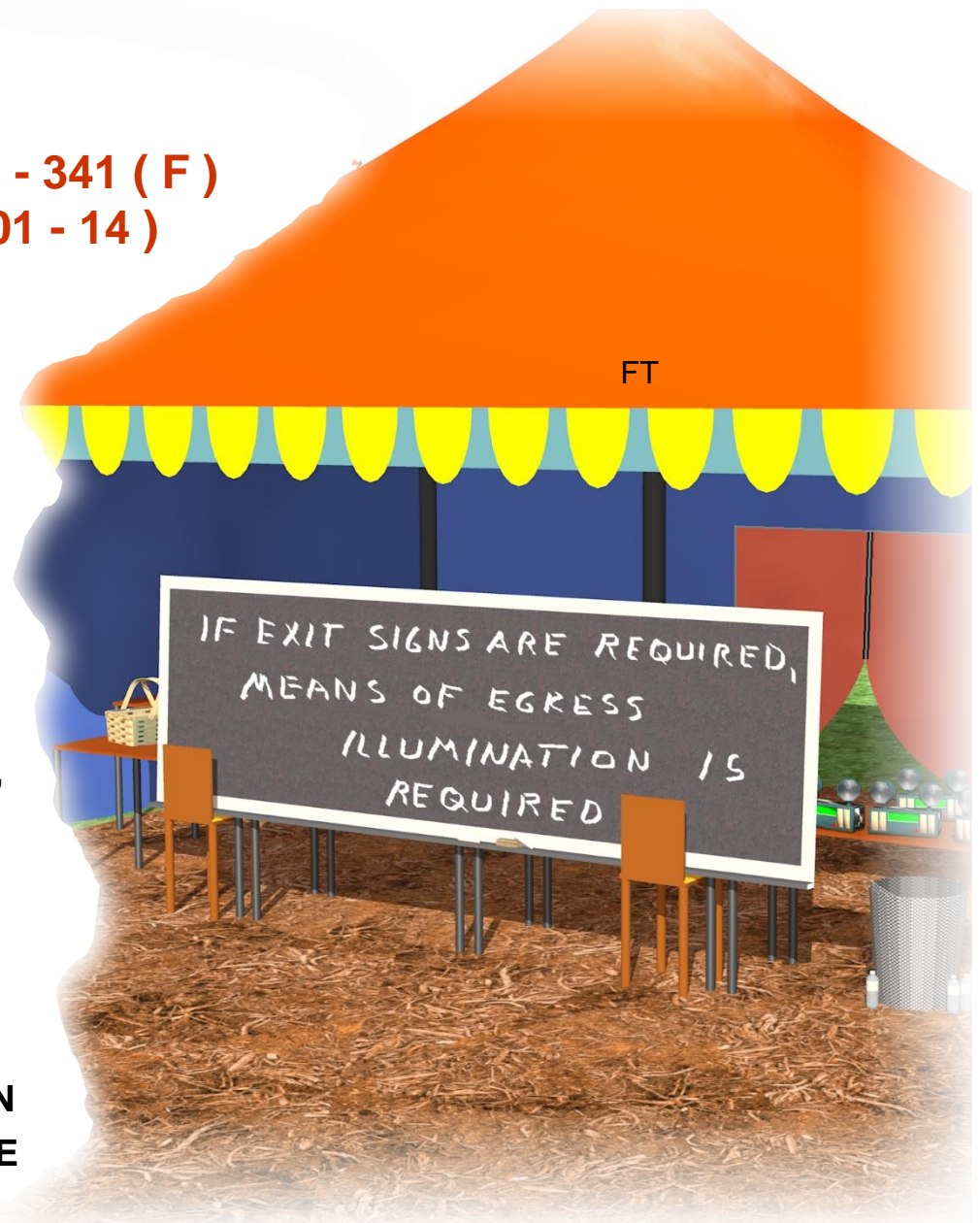
MEANS OF EGRESS ILLUMINATION  
IN A “SCOPE” TENT



# MEANS OF EGRESS ILLUMINATION

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

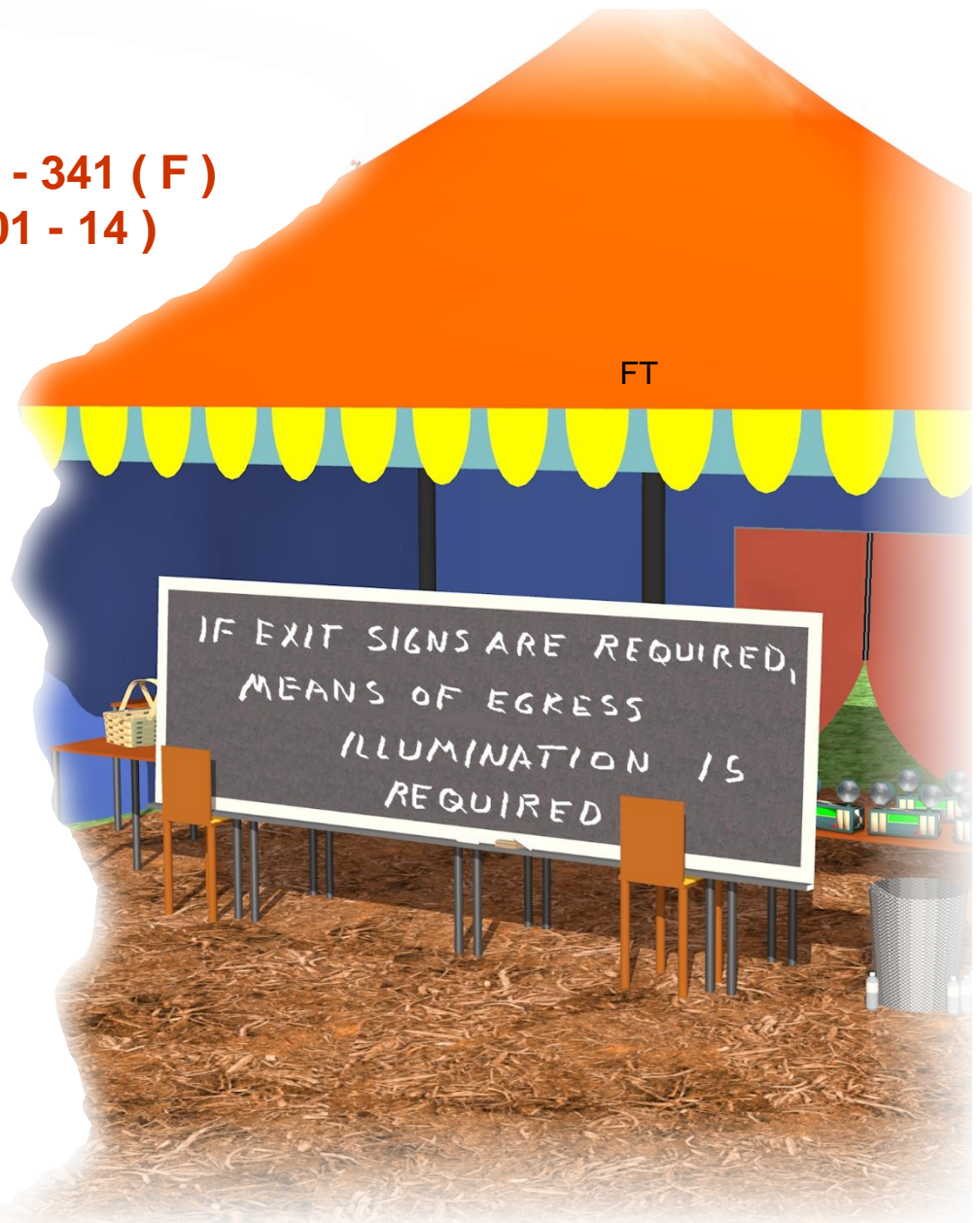
- THIS SECTION WAS AMENDED SO IT WOULD PARALLEL THE REQUIREMENT FOR *EXIT SIGNS* FOUND IN SEC. 3103.12.6
- THEREFORE, IN “REGULAR” TENTS, *MEANS OF EGRESS ILLUMINATION* IS REQUIRED WHEN EXIT SIGNS ARE REQUIRED
- GO TO THE SLIDES SHOWING THE REQUIREMENTS FOR *EXIT SIGNS* IN “REGULAR” TENTS TO REVIEW THE LOGIC



# MEANS OF EGRESS ILLUMINATION

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

- **LIGHT SHALL HAVE AN INTENSITY OF NOT LESS THAN ONE FOOT - CANDLE AT FLOOR LEVEL WHILE THE STRUCTURE IS OCCUPIED**
- **FIXTURES REQUIRED FOR MEANS OF EGRESS ILLUMINATION SHALL BE SUPPLIED FROM A SEPARATE CIRCUIT OR SOURCE OF POWER**



# **SUMMARY:** the following code sections govern this scenario

## ■ **Sec. 3101.1 – Scope**

## ■ **Sec. 3103.12.7 – Means of egress illumination**

→ Applicable to this scenario.



MEANS OF EGRESS ILLUMINATION  
IN A "REGULAR" TENT





## **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**