



# Construction Section Update

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**NCHEA 2020  
Pinehurst  
Conference**

March 13, 2020



<http://www.ncdhhs.gov/dhsr/>

# PRESENTERS

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Jeff Harms

919 855-3915

Don Schlagle

919 218-1174

- Please Hold Questions Until the End of the Session

# A Message From the Chief



Steve Lewis is retiring as of May 1, 2020



# COVID-19

- Changes?
- Rules
- Temporary Structures
- Meetings
- Inspections





To ensure that the construction and operation of buildings regulated by the Division provide a safe, healthy and suitable environment for residents, patients and inmates using those facilities.



Call 919 855-3893 to ask a general question. - or -  
Use the initials on the review letter to ask for the architect or engineer that did the review. HL-11206-MAS/DWS

Send FGI questions in writing so Supervisor can work with reviewer to get uniform answers.

# FGI Guidelines 2018



Adopted  
Effective  
1/1/2018



Adopted  
Effective  
7/1/2020



Hospitals



Outpatient  
Facilities



Residential  
Health, Care, and  
Support Facilities

Three Separate Books

# FGI Outpatient Guidelines Adopted

On January 1, 2020, legislation was passed amending the existing 10A NCAC 13C Ambulatory Surgery Licensure Rules by adopting certain portions of the FGI Guidelines for Outpatient Facilities [2018 edition].

- Part 1 General
- Part 2 (2.1 Common Elements, 2.2 Specific Req'mts., 2.7 Outpat. Surgery and 2.9 Endo)
- Part 3 ASHRAE 170 Ventilation



# Why Not Adopt the Entire Book?

This adoption was designed to replace the existing 10A NCAC 13C Rules for Outpatient Surgery Facilities and Endoscopy Facilities.

The 13C Rules were created for ASC's (*Endos by modification*)





# Why Adopt FGI Outpatient?

- A recognized national standard.
- Kept current – revised every 3 years
  - Designers already using.
- No more “watered down” rules for endos

# If Effective Date is 7/1/2020 Can FGI Outpatient Guidelines be Used Now?

## Yes

There are two ways to use FGI OP now:

1. Prior to the effective date of 7/1/2020 owners may elect to design AMBULATORY SURGERY CENTERS or ENDOSCOPY FACILITIES per FGI OP [2018]

*Or they may continue to use the existing 10A NCAC 13C Physical Plant Rules until 7/1/2020 when FGI OP becomes mandatory.*

*But don't mix and match.*

# Are FGI Outpatient Guidelines to be used now?

Yes

The second way FGI Outpatient is to be used now:

2. FGI Hospitals Errata item dated 4/13/2018 requires use of FGI OP for an outpatient service operated under a hospital's license and Medicare Provider No.

*Whether located in the hospital or off campus*

# Buzz Words for Examples

- Hospital Based Service - health care service operated under the hospital's license and Medicare provider number.
- Errata – FGI page showing changes made mid-cycle
- HB 1297 – NC House Bill [2009] that differentiates between a business occupancy and a hospital and whether a project is to be reviewed by DHSR.



# Don't Forget Errata Items



Errata sheet date: 12/20/19

## Errata for the 2018 *Guidelines for Design and Construction of Hospitals*\*

### Content Corrections

PAGE	SECTION	ERROR	CORRECTED TEXT (date correction published)
67	2.1-1	<b>2.1-1 General</b> ...	<b>2.1-1 General</b> ... <u>2.1-1.1.4 Outpatient projects located in</u> <u>hospitals shall meet the requirements of the FGI</u> <u>Guidelines for Design and Construction of</u> <u>Outpatient Facilities.</u> (4/13/18)

**\*\*DHSR Interpretation: For a HL based OP service not in the hospital,  
use FGI OP Guidelines\*\***

# House Bill 1297

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2009  
SESSION LAW 2009-487  
HOUSE BILL 1297

SECTION 4.(a) G.S. 131E-76(3) reads as rewritten: "(3) "Hospital" means any facility which has an organized medical staff and which is designed, used, and operated to provide health care, diagnostic and therapeutic services, and continuous nursing care primarily to inpatients where such care and services are rendered under the supervision and direction of physicians licensed under Chapter 90 of the General Statutes, Article 1, to two or more persons over a period in excess of 24 hours. The term includes facilities for the diagnosis and treatment of disorders within the scope of specific health specialties. **The term does not include** private mental facilities licensed under Article 2 of Chapter 122C of the General Statutes, nursing homes licensed under G.S. 131E-102, and adult care homes licensed under G.S. 131D-2.131D-2, and **any outpatient department including a portion of a hospital operated as an outpatient department, on or off of the hospital's main campus, that is operated under the hospital's control or ownership and is classified as Business Occupancy by the Life Safety Code of the National Fire Protection Association as referenced under 42 C.F.R. § 482.41. Provided, however, if the Business Occupancy outpatient location is to be operated within 30 feet of any hospital facility, or any portion thereof, which is classified as Health Care Occupancy or Ambulatory Health Care Occupancy under the Life Safety Code of the National Fire Protection Association, the hospital shall provide plans and specifications to the Department for review and approval**<sup>14</sup> as required for hospital construction or renovation in a manner described by the Department."

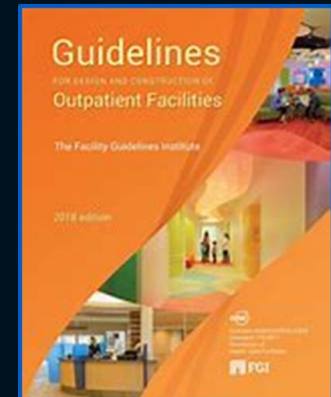
# Which Rules to Use? Scenario 1

## CRITERIA

- HL Based (In and Operated By)
- OP Only Service
- Maintain Rated Separation



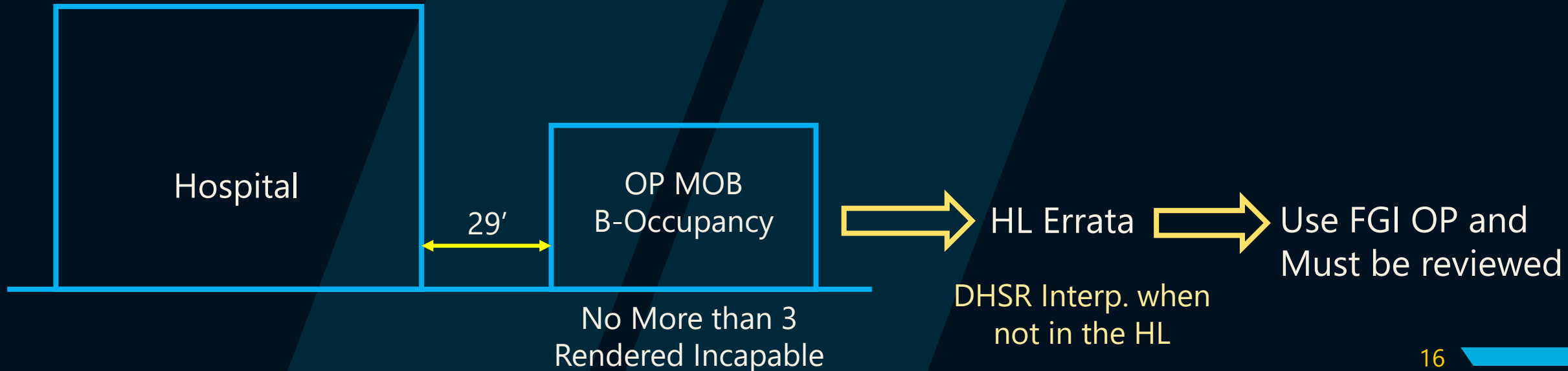
HL Errata



# Which Rules to Use? Scenario 2

## CRITERIA

- HL Owned
- OP only MOB (3 story)
- Business Occupancy (all floors)
- Closer than 30' to HL
- Not HB 1297 Exempt

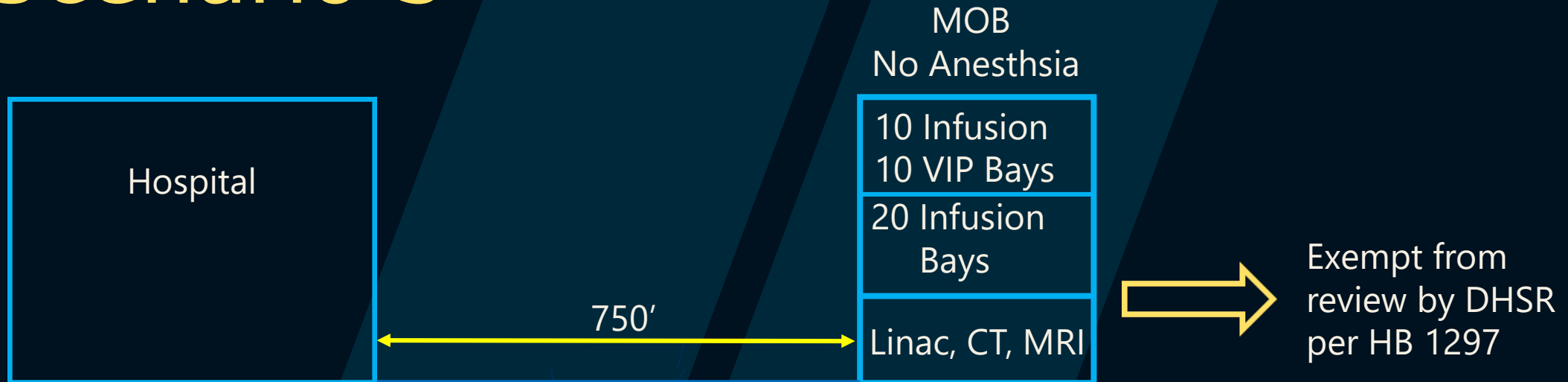




# Which Rules to Use? Scenario 3

## CRITERIA

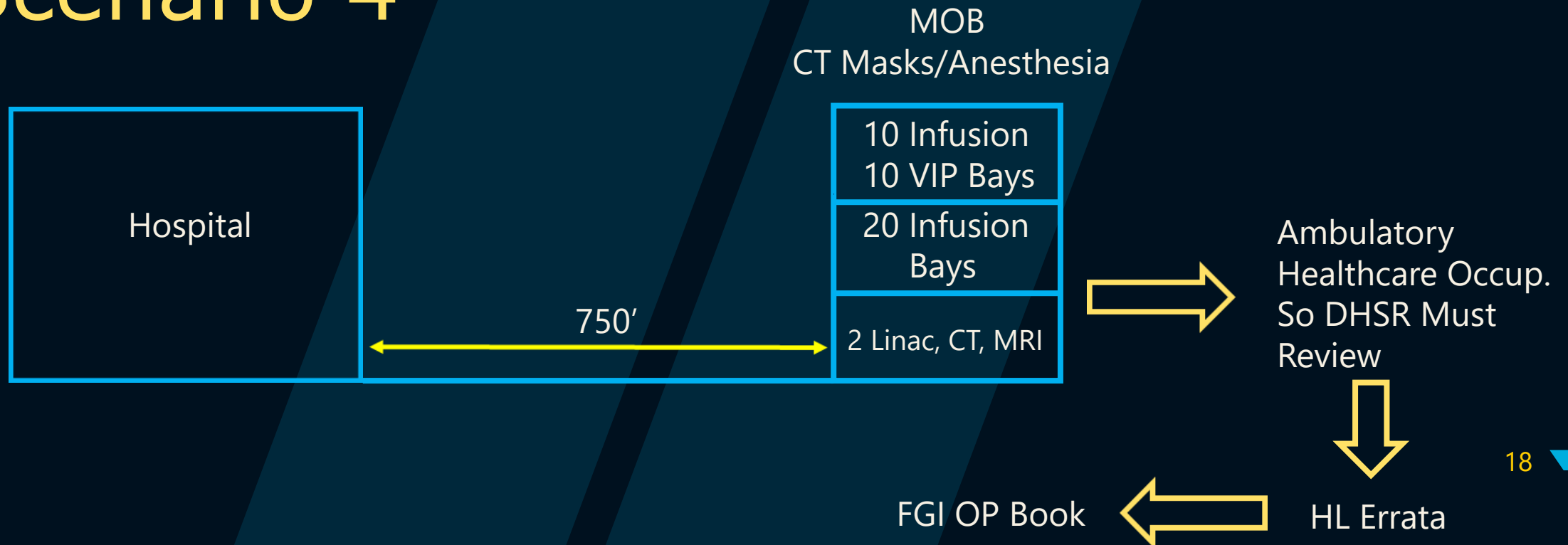
- HL Owned
- OP only MOB (3 story)
- Business Occupancy (all floors)
- Further than 30' from HL
- HB 1297 Exempt



# Which Rules to Use? Scenario 4

## CRITERIA

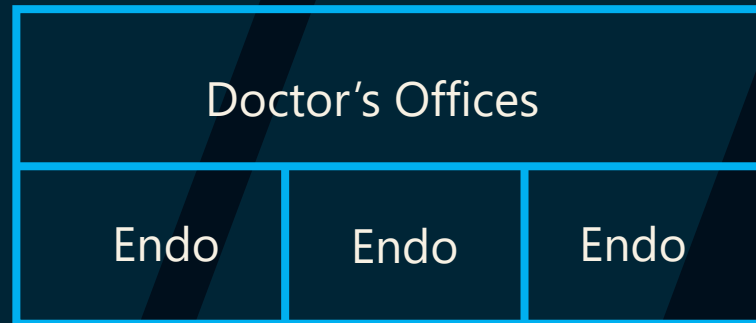
- HL Owned
- OP only MOB (3 story)
- ??? Occupancy
- Further than 30' to HL
- HB 1297 Exempt ???



# Which Rules to Use? Scenario 5

## CRITERIA

- A Dr.'s partnership obtained a CON for 3 Endo Procedure Rms
- Not affiliated with a hospital
- Freestanding facility



Previously met 13C  
"watered down"  
ASC Rules



Use FGI OP  
Ch. 2.9

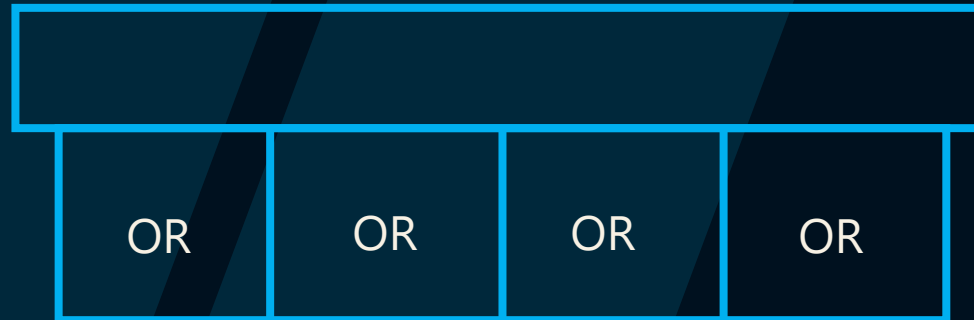


DHSR review due  
to anesthesia &  
more than 3.

# Which Rules to Use? Scenario 6

## CRITERIA

- Tennessee Co. gets CON for 4 O/R Ambulatory Surgery Center
- Not Hospital Based



Use OP Ch 2.7 for any # of O/Rs  
Previously must meet 10A NCAC 13C



# Unobstructed Means of Egress



# Buzz Words

- Means of Egress – a continuous and unobstructed way of travel from any point in a building to a public way.

*NFPA 101 [2012] Def. 3.3.170*

*(1) exit access    (2) the exit    (3) exit discharge*

- Unobstructed Travel – No type of barrier can impede free and full instant use of the means of egress. *A.7.1.10.1*

- Authority Having Jurisdiction – the person or office enforcing the Code and determining whether provisions of the Code are met.

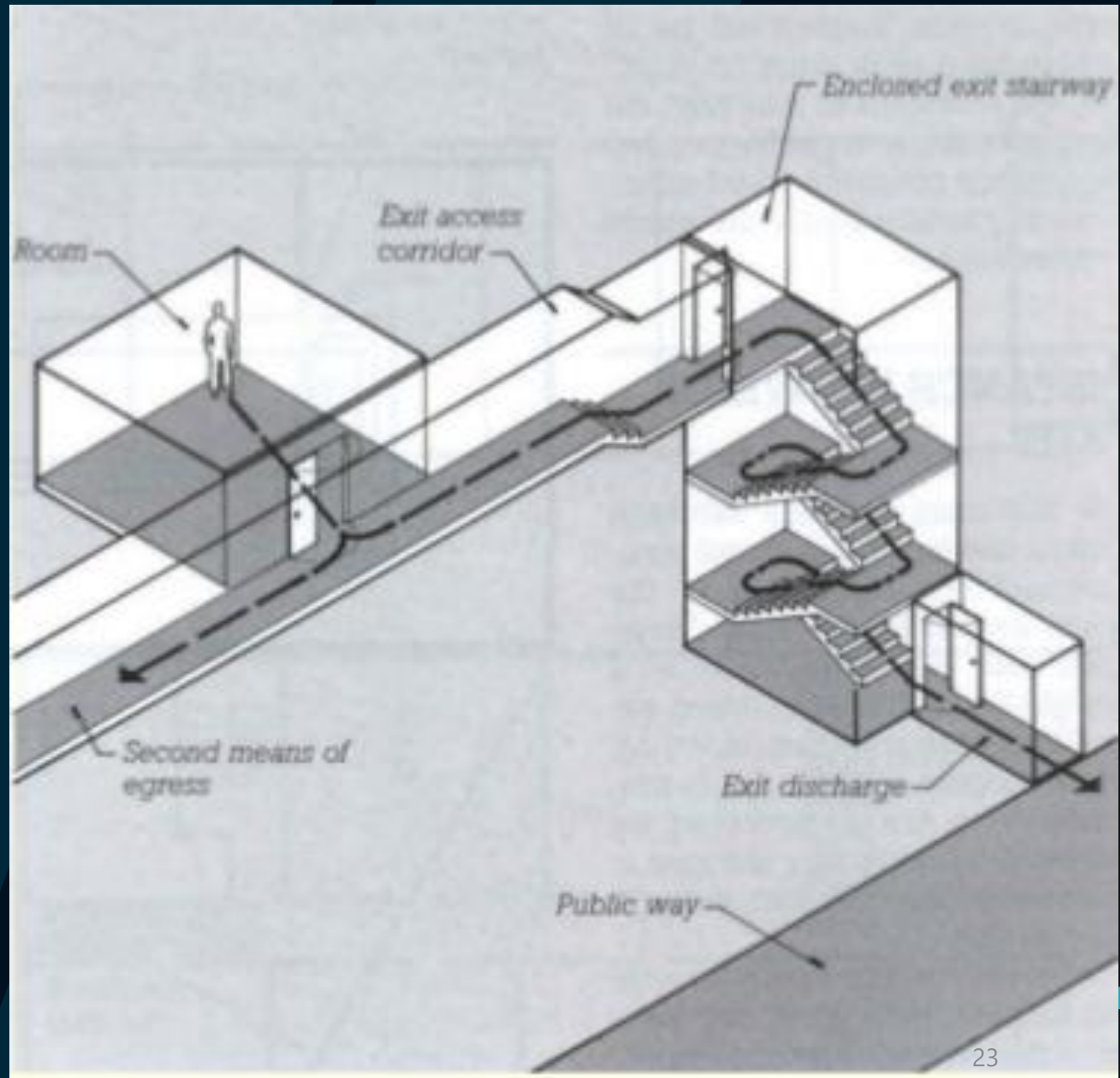
*4.6.1.1*

# Means of Egress Reliability

Shall be continuously maintained free of all obstructions or impediments to full and instant use...

*NFPA 101 7.1.10*

None of the components can be blocked.



# Construction, Repair and Improvement

NFPA 101 [2012] 18.7.9.1/19.7.9.1

Construction, repair and improvement operations shall comply with 4.6.10 (*means of egress and fire protection features are continuously maintained...*)

18.7.9.2/19.7.9.2

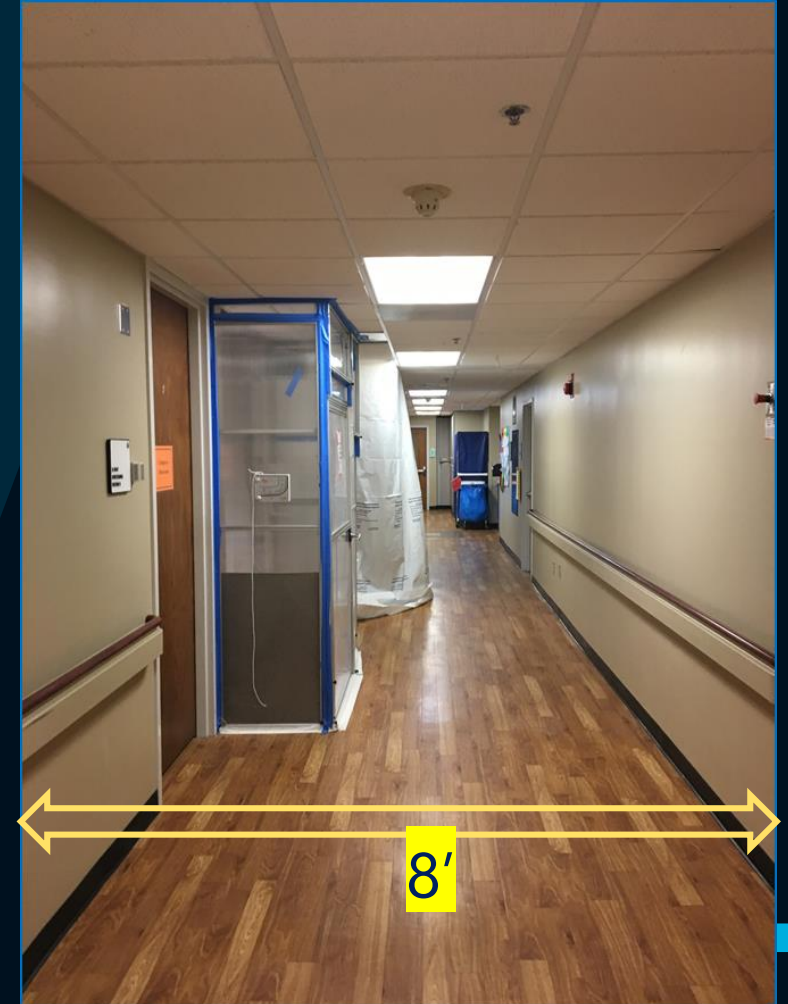
The means of egress shall be inspected daily for compliance with 7.1.10.1 (*continuously maintained free of all obstructions or impediments to full and instant use in the case of fire or other emergency*).



# Corridor Obstruction Questions

In a hospital, can a portion of a corridor be partitioned off to allow work in existing areas as long part of the egress corridor is maintained? *[For example an 8ft corridor with a temporary partition built 3' into the corridor.]*

**NO.** In CMS Certified facilities in NC, the means of egress must be continuously maintained free of all obstructions or impediments for full instant use in case of fire or other emergency.



# Corridor Obstruction Questions

If we are able to use temporary partitions to do phased work in existing areas, are gypsum board and stud partitions an allowable method, or would zippered plastic partitions be acceptable?

According to NFPA 241, temporary enclosures are to be non-combustible panels or flame-resistant tarps. As such, separation as required could be achieved with gypsum board and metal stud partitions. Plastic partitions would not be permitted.

# Rare but Case-by-Case

If you run into an impossible situation that can't be resolved without a temporary means of egress obstruction, you may have a prayer but it will be a very small one.



- Submit to DHSR the scope, details and duration of the necessary work.
- Describe any staff and contractor training and monitoring of the area that will be done
- Explain special precautions taken.
- Must receive approval.

# Corridor Obstruction Question

What type of interim measures are allowed by CMS for the life safety code to allow for building expansion and renovation?

CMS requires compliance with 2012 edition LSC requirements regarding construction operations and has not issued a policy on interim measures.

# Any Partial Blockage in NC Hospital Corridors?

**No** Exits must be maintained and corridors full width.



# Who's Minding The Store

*Items We Should Not See  
On A Final Inspection*

THIS IS MY SHIP

(Fix It Now There Is No Repair Shop Out At Sea)



# Who's Minding The Store



OSHA Would  
Love This



No Gaskets Final  
Filters



Step Stool

We Only Hire  
over 7'2" Tall



Service  
Receptacle



# Who's Minding The Store



Simple Fix



# Who's Minding The Store



Sanitary Drain



It Gets Better or  
Maybe Not

# Sprinkler Flex Line Leaking



# ~~Plumbing Repair~~

## Oxygen Line Repair





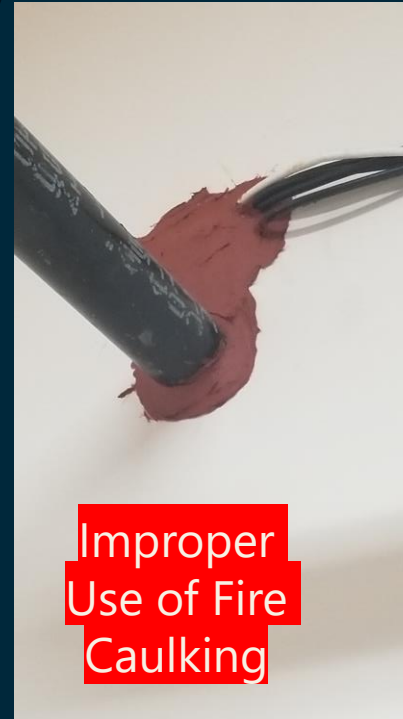
# Self Closing Louvers Not Allowed



# When is The Best Time to Fix Something



Direct Contact  
Dissimilar Metals



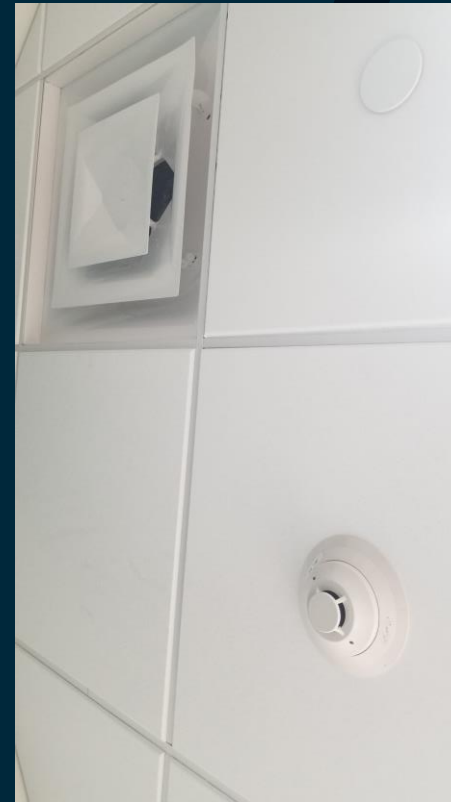
# When is The Best Time to Fix Something



No Wall Labels &  
No Fire Stopping



No Valve Labels To  
Indicate Area Served



Smoke Head  
Must Be 3 Feet



# Mobile Unit Maintenance Records

Testing must be done for every mobile unit at each relocation setup:

- Grounding system
- Emergency power
- Exit lighting (may be 90 min. battery or generator)
- Fire alarm (coach to hospital and vice versa). Also a pull station
- Nurse call per Table 2.1-2
- IT
- Communication system (incl. telephone direct to host PBX)

Bollards to Protect  
the Mobile Unit



Electrical Panel

# LOCKING SYSTEM (Deficiencies)

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- No emergency light at locked door controls
- Not releasing on fire alarm
- Remote release not releasing all doors in egress path
- Fire alarm not releasing doors
- Electrical diagram and locking system map not posted
- Local release is not of the on/off type switch

# Locking System Testing Requirements

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Must Be Approved by the Building & Fire Official

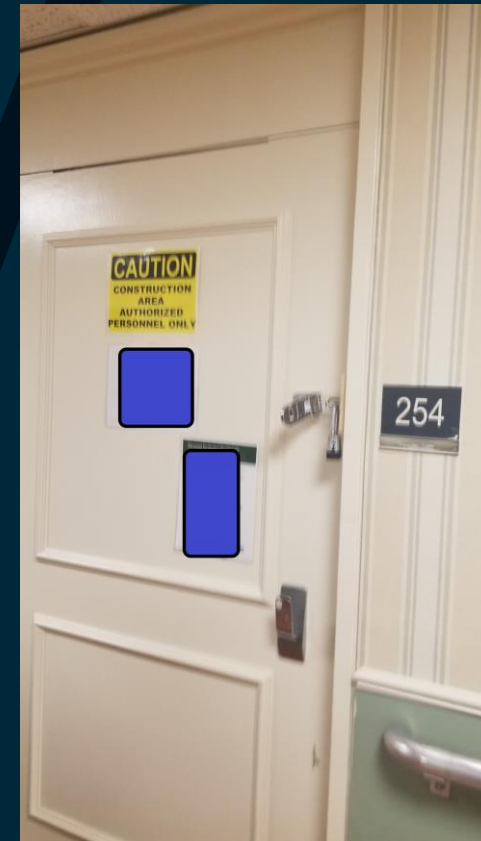
- Prior To Installation
- After Installation
- Prior To Initial Use
- Periodically Thereafter

DHSR **MUST** COMPLETE TESTING PRIOR TO USE!!!

# Exit Signs Must Be Visible In corridors



What Are Exit Signs !!!



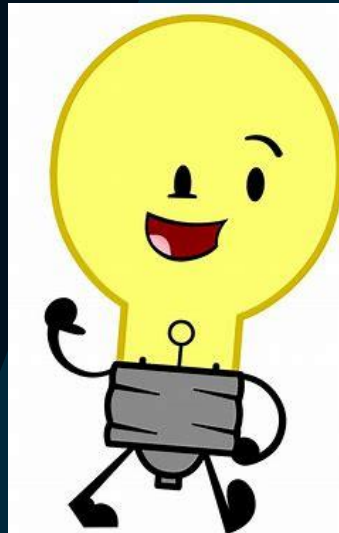
Locked Exit !!!

# Required Life Safety Lighting

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- Must not be connected to timers
- Must not be switched

# Compliant Life Safety Lighting?



NO



# Required Life Safety Lighting

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NFPA 101 7.8 – Shall be continuous during conditions of occupancy unless otherwise provided in 7.8.1.2.2.

7.8.1.2 Illumination of means of egress shall be continuous unless otherwise provided in 7.8.1.2.2.

7.8.1.2.2 Unless prohibited by an Occupancy Chapter motion sensor –type switches shall be permitted that comply with items 1 thru 5

The NCSBC is more restrictive and requires minimum light levels at all times that the room or space served by the means of egress is occupied.



# Required Life Safety Lighting

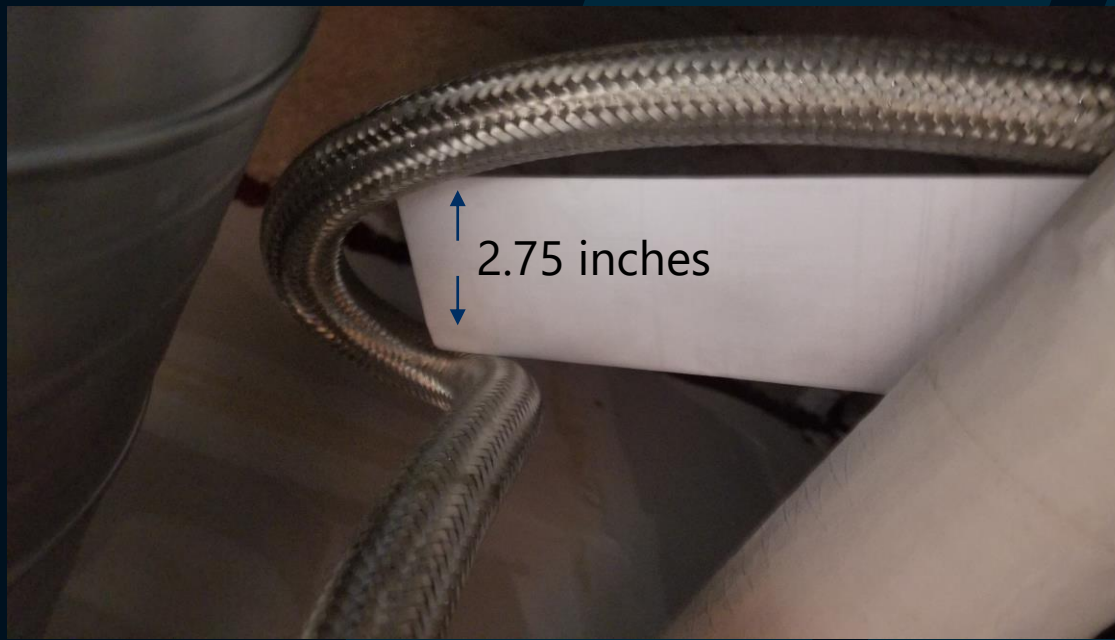
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NCSBC 1008.2 - The means of egress serving a room or space shall be illuminated at all times that the room or space is occupied.

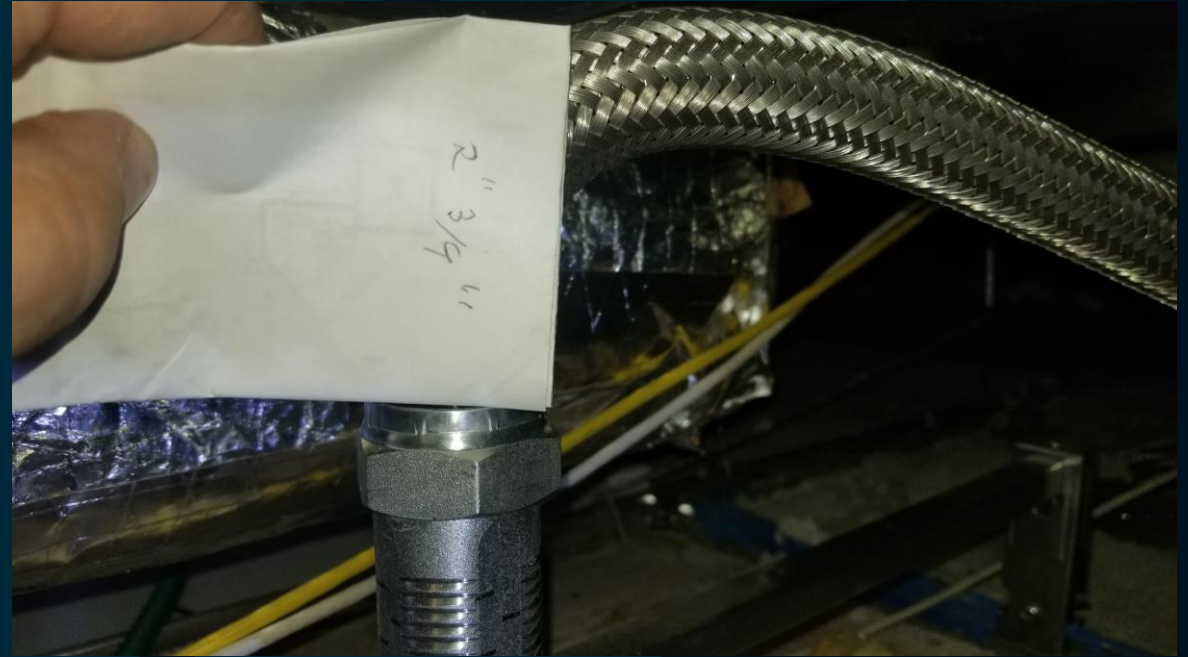
NCSBC 1008.2.1 - Illumination under normal power.

NCSBC 1008.2.1 - The means of egress illumination level shall not be less than 1 foot candle at the walking surface<sup>46</sup>

# Flexible Sprinkler Requirements



# Flexible Sprinkler Requirements



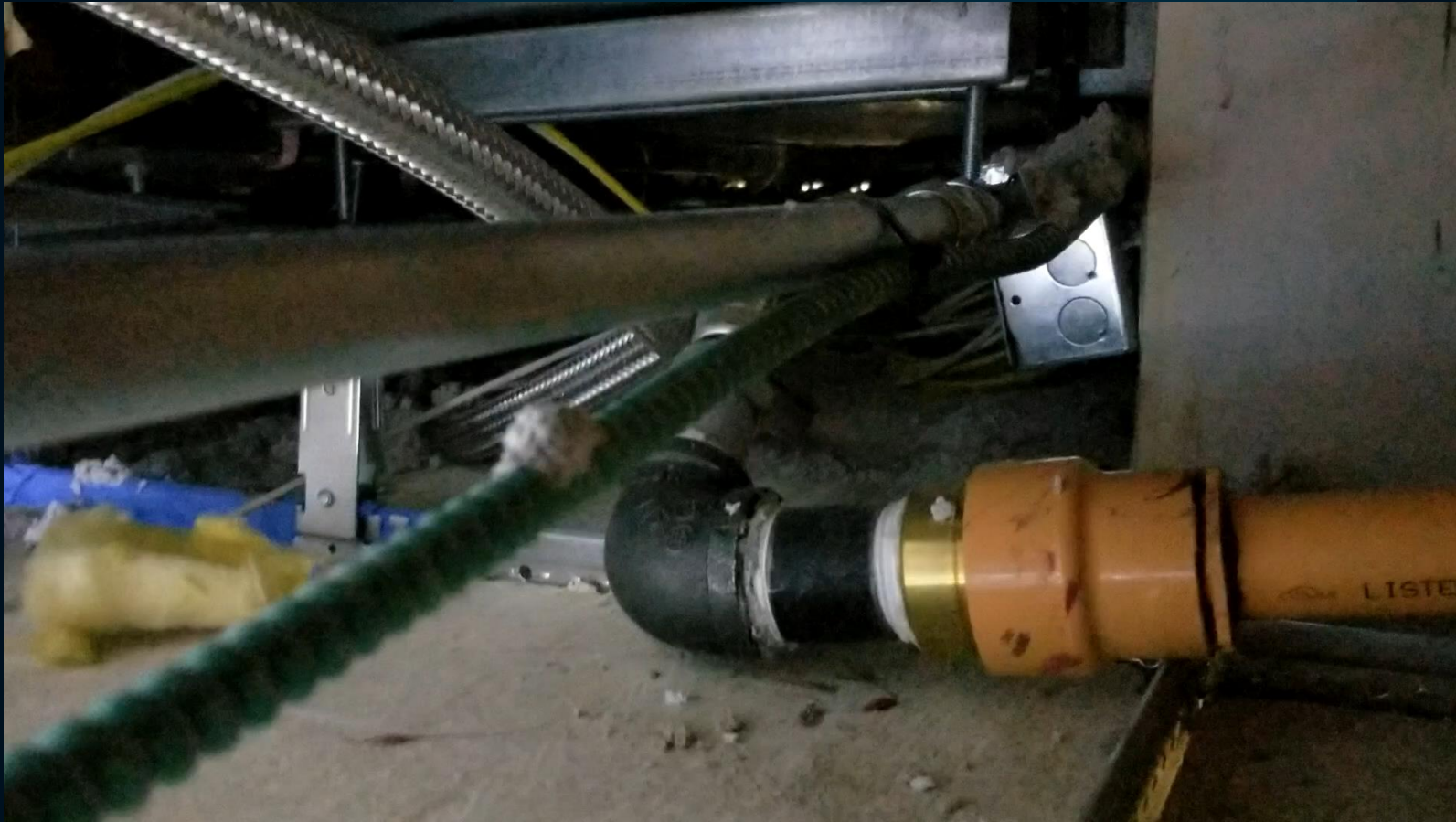
# Flexible Sprinkler Requirements

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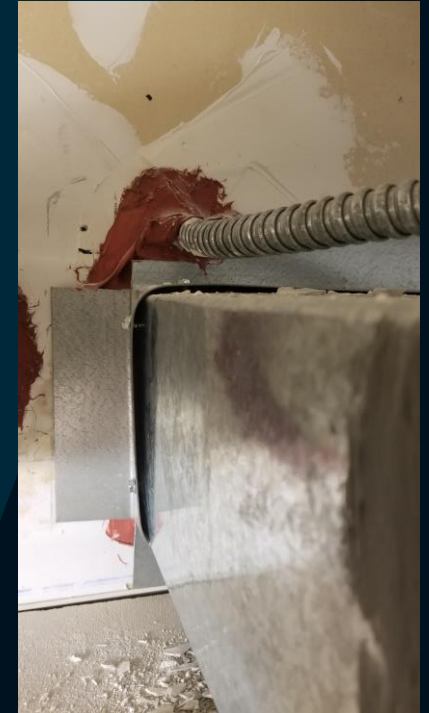
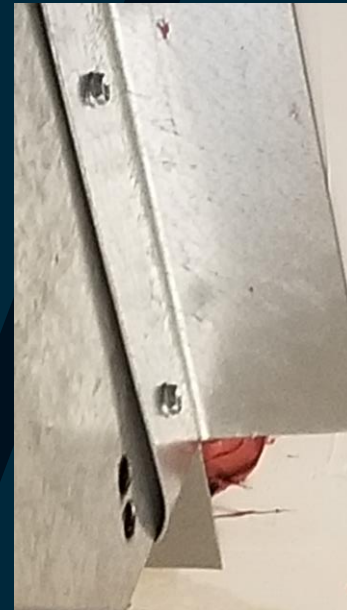
- NFPA 13 Minimum Radius 3 inches
- FM system 7 inch minimum radius
- No bends within 2 inches of connector nut



# Flexible Sprinklers



# Dampers Still A Problem



# Dampers Still A Problem





# Approving By Doc's

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When we agree to accept by Documentation

1. Must receive documentation of all requested items
2. Must be no deficiencies in the documentation.
3. We require time to review the documents
4. Once accepted we will provide a notice of compliance for use.

# Air Balance Reports

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Must be completed

Must be reviewed and approved by the engineer of record

Should have no outstanding items

The values in the ASHRAE Table are absolute minimums

(If the intent is for the final balance to be within 10 percent of design, the design must be 10% greater than the minimum requirements)

# Testing Gen Set E-Stops



What is the procedure for resetting the E-Stop

Does the Gen Set have an output breaker

This is becoming a common item on inspections

# Fire Alarm / Sprinkler Systems

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- Fire Alarms must not be disabled
- Sprinklers must not be disabled

ANY QUESTIONS?

In event of a system failure the following actions are required

- a Fire Watch must be implemented
- LAHJ must be notified
- DHSR must be notified



# THANK YOU!

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We will stay  
for questions