



2017

BARRIER MANAGEMENT
SYMPOSIUM

George Mills, Director
Department of Engineering
The Joint Commission

BARRIER MANAGEMENT SYMPOSIUM

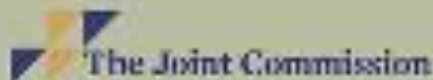
...at no cost to the attendee...

Barrier Management Symposium

*Together we can make the Environment of Care
a SAFE Environment of Care*

Mission Statement

To provide concise, accurate education at no cost to the attendee,
resulting in excellent barrier system management
in healthcare buildings



BARRIER MANAGEMENT SYMPOSIUM



Program Developers:

- Joint Commission
- Firestop Contractors International Association
- Underwriters Laboratories

Participating Organizations:

- American Society for Healthcare Engineering
- Gypsum Association
- Fire Damper Industry
- Fire Rated Glazing Industry
- Door & Hardware Institute

Top 10 Findings Comparison

| Standard | 2015 % Noncompliance | 2016 % Noncompliance | 2016 Rank |
|-------------|----------------------|----------------------|-----------|
| EC.02.06.01 | 56% | 62% | 1 |
| IC.02.02.01 | 52% | 59% | 2 |
| EC.02.05.01 | 53% | 58% | 3 |
| LS.02.01.20 | 50% | 51% | 4 |
| LS.02.01.30 | 43% | 50% | 5 |
| RC.01.01.01 | 49% | 47% | 6 |
| LS.02.01.10 | 46% | 46% | 7 |
| LS.02.01.35 | 43% | 43% | 8 |
| PC.02.01.03 | 29% | 40% | 9 |
| EC.02.02.01 | 37% | 39% | 10 |

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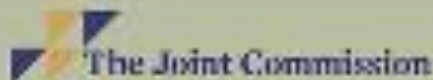
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#4 LS.02.01.20

| EP | Assembly Affected | Issue |
|-----------|--------------------------|--|
| 1 | Door | Locking |
| 2 | Door | Swing |
| 3 | Horizontal exits | Requirements |
| 4 | Outside stair | Building protection |
| 5 | Horizontal exit: door | Requirements |
| 6 | Horizontal exit | Fire jump |
| 8 | Exit | Discharge |
| 9 | Stair doors | Hold open |
| 10 | Doors | New boiler rooms, mechanical rooms, and heater rooms |

#7 LS.02.01.10

| EP | Assembly Affected | Issue |
|-----------|--------------------------|-------------------|
| 1 | Building type | Construction type |
| 3 | Rated walls | Features |
| 4 | Rated walls | Openings |
| 5 | Rated doors | Features |
| 6 | Doors | Protective plates |
| 7 | Doors | Coverings |
| 8 | Ducts | Penetration |
| 9 | Penetrations | Firestopping |

#5 LS.02.01.30

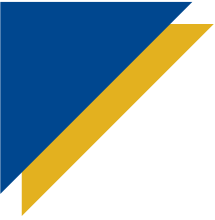
| EP | Assembly Affected | Issue |
|-----------|--------------------------------|-------------------------|
| 1 | Vertical openings | Protection |
| 2 | Hazardous areas | Walls & doors |
| 3 | Gift shop | Protection |
| 6 | Corridor partitions | Features |
| 7 | Corridor walls, new | Limit transfer of smoke |
| 8 | Fire windows in corridor walls | Features |
| 9 | Corridor doors | Features |
| 10 | Corridor doors | Plates |
| 11 | Corridor doors | Features |

#9 LS.02.01.30

| EP | Assembly Affected | Issue |
|-----------|--------------------------------|--------------------------|
| 12 | Corridor walls | Openings |
| 16 | Smoke barriers | Features |
| 18 | Smoke barriers | Features |
| 19 | Smoke barriers | Features |
| 20 | Smoke barriers | Duct penetrations |
| 21 | Smoke barriers | Damper protection |
| 22 | Smoke barriers; smoke doors | Window opening rating |
| 23 | Smoke barriers doors | Features |
| 24 | Exit stair | Rating |

LS.02.01.50

| EP | Assembly Affected | Issue |
|-----------|---|--------------|
| 8 | Linen & waste chute inlet doors | Protection |
| 9 | Linen & waste chute inlet & discharge doors | Features |
| 10 | Linen & trash chutes discharge door | Features |
| 11 | Linen & waste chutes discharge | Separation |



DOOR INSPECTIONS

ANNUALLY

EC.02.03.05 EP 25


- ▶ The hospital has written documentation of annual inspection and testing of door assemblies by individuals who can demonstrate knowledge and understanding of the operating components of the door being tested. Testing begins with a pre-test visual inspection; testing includes both sides of the opening.

Note: For additional guidance on testing of door assemblies, see NFPA 101-2012: 7.2.1.5.10.1; 7.2.1.5.11; NFPA 80-2010: 4.8.4; 5.2.1; 5.2.3; 5.2.4; 5.2.6; 5.2.7; 6.3.1.7; NFPA 105-2010: 5.2.1.


DOOR INSPECTIONS

- ▶ Required for all fire and smoke barrier doors
 - ❑ Corridor doors not required if not part of fire or smoke barrier
- ▶ Based on NFPA 101-2012, 7.2.1.15
 - ❑ 18/19.2.1 references Chapter 7
 - 18/19.2.2.2.1 references 7.2.1
 - ❑ It was determined door inspections were beneficial to patient safety

DOOR INSPECTIONS

- 
- ▶ Doors to be included in the annual door inspection include:
 - ❑ Door leaves equipped with panic hardware or fire exit hardware in accordance with 7.2.1.7
 - ❑ Door assemblies in exit enclosures
 - ❑ Electrically controlled egress doors
 - ❑ Door assemblies with special locking arrangements subject to 7.2.1.6

DOOR INSPECTIONS

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- ▶ The Joint Commission does not require the following doors to be included in the annual door inspection:
 - ❑ Corridor doors (i.e., patient room doors)
 - ❑ Office doors (provided the room does not contain flammable or combustible materials)

FIRE DOORS INSTALLED WHERE NOT REQUIRED

- ▶ NFPA 101-2012, 4.6.12.3 (LS.01.01.01 EP 6)
 - ❑ Existing fire protection features obvious to the public, if not required by the Code, shall be either maintained or removed.
- ▶ Doors shall be maintained per the barrier assembly requirements
- ▶ Doors that exceed the barrier assembly requirements shall be maintained as designed
 - ❑ For example, if a fire-rated door were installed in a smoke barrier, the fire-rated door would be subject to annual fire door inspections
 - The smoke barrier would be maintained as a smoke barrier

FIRE DOORS INSTALLED WHERE NOT REQUIRED

Fire-rated doors in a nonrated barrier assembly

- ❑ Must be maintained as a fire door unless the features which identify it as a fire door have been removed in a manner that maintains the opening protective requirements applicable to the barrier into which it is installed
- ❑ For example, if a 90-minute fire-rated door were installed in an existing smoke barrier, the door would need to be annually inspected and tested as a fire door and the smoke barrier maintained as a smoke barrier
 - If the 90 minute fire rated door were modified (i.e. removing the bottom rod and floor receiver) remove all fire door hardware and labeling, and repair as a smoke door (NFPA 105-2010, 5.1.4)
 - Inspect and test annually as a smoke barrier door

DEPARTMENT OF ENGINEERING

George Mills, MBA, FASHE, CEM, CHFM, CHSP
Director

Kathy Tolomeo, CHEM, CHSP
Senior Engineer

Andrea Browne, PhD., DABR
Medical Physicist

John Maurer, CHFM, CHSP, SASHE
Engineer

Herman McKenzie, MBA
Engineer

James Woodson, P.E., CHFM
Engineer

Kate Dolezal, MA, CRC, LPC
Technical Coordinator



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