The Suite Advantage

Prepared by:
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• President of Koffel Associates, Inc.
• Serves on numerous NFPA technical committees
• 40+ years industry experience

Applicable Codes
  • Currently enforced by accreditation organizations
• International Building Code
  • 2012, 2015, 2018 Editions
• Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospitals and Outpatient Facilities
  • 2014 Edition
NFPA 101: Life Safety Features

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Health Care Occupancies

XX.1 General
XX.2 Means of Egress
XX.3 Protection
XX.4 Special Provisions
XX.5 Building Services
XX.6 Reserved
XX.7 Operating Features

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NFPA 101 Suites Section – Reorganized in 2012

• General
  • Separation, hazardous areas, subdivision
  • Sleeping suites
    • Arrangement, number of means of egress, size, travel distance
  • Non-sleeping suites
    • Organized the same as sleeping
  • Non-patient care suites
    • In accordance with primary use of the suite
When to Utilize Suites

- When there is patient care open to corridors
- Treatment bays, non-latching doors, direct patient access, etc.
- When staff needs quick access to equipment or supplies
  - Case carts, patient transport, equipment...
- Operating rooms, ICUs, Emergency departments
- Such items would typically restrict clear width

Suite or Sour?

- Emergency Department
  - Latching doors
  - Constant corridor clutter
  - Daily overflow results in patient treatment in corridors

Suite!

- Creating a suite
  - Defining area
  - Adding separations
    - Doors and walls
  - Maintaining egress
    - Exit access
    - Dead-ends
When to NOT Utilize Suites

• If a suite would limit access to exits
  • Cannot egress from a corridor through a suite
  • By definition, a corridor has access to TWO exits
    • NFPA 101 §18.2.5.4 Every corridor shall provide access to not less than two approved exits in accordance with 7.4 and 7.5 without passing through any intervening rooms or spaces other than corridors or lobbies.
• If a suite would create a dead-end (30 ft)

Suites – Potential Challenges

General Suite Requirements

• Separation from other suites and spaces
  • Must meet corridor requirements
• Hazardous areas
  • No intervening rooms
  • Separations from remainder of suite
• Subdivision
  • Not required to be fire rated (unless hazardous)
NFPA 101: Suite Intervening Rooms

• 2012 edition eliminates the limit on the number of intervening rooms in both sleeping and non-sleeping suites
• 100 ft distance to an exit access door regardless of the number of intervening rooms

Egress Through An Adjoining Suite

Patient Sleeping Suites
Sleeping Suites

- Arrangement
- Number of Means of Egress
- Travel Distance
- Maximum Size

Sleeping Suites: Arrangement

- 2012 LSC §18.2.5.7.2.1:
  - Direct supervision OR
  - Smoke detection in sleeping rooms
- 2015/2018 IBC §407.4.4.5:
  - Limited to 8 patient care beds OR
  - Direct and constant supervision OR
  - Smoke detection in sleeping rooms
- 2012 IBC §407.4.3.5
  - w/ one intervening room:
    - Limited to 8 patient care beds AND
    - Direct and constant supervision
Sleeping Suites: Intervening Rooms

<table>
<thead>
<tr>
<th>CODE</th>
<th>NUMBER OF INTERVENING ROOMS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 LSC</td>
<td>No limitation</td>
</tr>
<tr>
<td>2012 IBC §407.4.3.3.1</td>
<td>Up to 1</td>
</tr>
<tr>
<td>2015 IBC §407.4.4.3</td>
<td>Up to 3</td>
</tr>
<tr>
<td>2018 IBC §407.4.4.3</td>
<td>Up to 3</td>
</tr>
</tbody>
</table>

- 2015 and 2018 IBC limit by “passage through more than 3 doors”
- *Travel distance to exit access corridor must be met

Ante-Room Within Suite

Sleeping Suites: Number of Exit Access Doors

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUITE LARGER THAN 1,000 SQ FT</th>
<th>SUITE LESS THAN 1,000 SQ FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 LSC §18.2.5.7.2.2(A)</td>
<td>2*</td>
<td>1</td>
</tr>
<tr>
<td>2012 IBC §407.4.3.5.2</td>
<td>2*</td>
<td>1</td>
</tr>
<tr>
<td>2015 IBC §407.4.4.5.2</td>
<td>2*</td>
<td>1</td>
</tr>
<tr>
<td>2018 IBC §407.4.4.5.2</td>
<td>2*</td>
<td>1</td>
</tr>
</tbody>
</table>

- For 2 MOE:
  - 1 MOE direct to corridor
  - Other can be to adjacent suite

* Doors must be remote
Sleeping Suites: Travel Distance

<table>
<thead>
<tr>
<th>CODE</th>
<th>MAX DISTANCE TO EXIT ACCESS</th>
<th>MAX DISTANCE TO EXIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 LSC §18.2.5.7.2.4</td>
<td>100 ft</td>
<td>200 ft</td>
</tr>
<tr>
<td>2012 IBC §407.4.3.5.3, Table 1016.2</td>
<td>100 ft; ≤3 intervening room</td>
<td>200 ft</td>
</tr>
<tr>
<td>2015 IBC §407.4.4.3, Table 1017.2</td>
<td>100 ft; passage through ≤3 doors 125 ft w/SD system</td>
<td>200 ft</td>
</tr>
<tr>
<td>2018 IBC §407.4.4.3, Table 1017.2</td>
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<td>200 ft</td>
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Sleeping Suites: Maximum Size

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<th>CODE</th>
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<tr>
<td>2012 LSC §18.2.5.7.2.3</td>
<td>7,500 10,000 w/direct supervision and complete SD system</td>
</tr>
<tr>
<td>2012 IBC §407.4.3.5.1</td>
<td>5,000</td>
</tr>
<tr>
<td>2015 IBC §407.4.4.5.1</td>
<td>7,500 10,000 w/ complete SD system</td>
</tr>
<tr>
<td>2018 IBC §407.4.4.5.1</td>
<td>7,500 10,000 w/ complete SD system</td>
</tr>
</tbody>
</table>
Sleeping Suites: Maximum Size

Non-Sleeping Suites

- Arrangement
- Number of Means of Egress
  - Egress though adjoining suite permitted (2nd route)
- Travel Distances
- Maximum Size
Non-Sleeping Suites: Intervening Rooms

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- 2015 and 2018 IBC limit by “passage through more than 3 doors”
- *Travel distance to exit access corridor must be met

Arrangement - Intervening Rooms

Non-Sleeping Suites: Number of Exit Access Doors

<table>
<thead>
<tr>
<th>CODE</th>
<th>SUITE LARGER THAN 2,500 SQ FT</th>
<th>SUITE LESS THAN 2,500 SQ FT</th>
</tr>
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<tbody>
<tr>
<td>2012 LSC §18.2.5.7.3.2</td>
<td>2*</td>
<td>1</td>
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<tr>
<td>2012 IBC §407.4.3.6.2</td>
<td>1*</td>
<td>1</td>
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- For 2 MOE:
  - 1 MOE direct to corridor
  - Other can be to adjacent suite
- *Doors must be remote
Suite or Sour?

- Challenges with storage around ORs and need for multiple suites
- Total area limitations exceeded
- Concerns with access to a corridor

Suite!

- Divided area into multiple suites
- Utilized a horizontal exit in lieu of corridor access

Suite or Sour?

- Emergency department requires a suite
- Non-latching room doors
Suite!

- Adding cross-corridor doors defined the suite area
- Access to exit stair maintained
- No dead-ends created

Non-Sleeping Suites: Travel Distance

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<td>100 ft: ≤1 intervening room 50 ft: 2 intervening rooms</td>
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<td>2012 IBC §407.4.3.6.1</td>
<td>10,000</td>
</tr>
<tr>
<td>2015 IBC §407.4.4.6.1</td>
<td>12,500 15,000 w/SD system</td>
</tr>
<tr>
<td>2018 IBC §407.4.4.6.1</td>
<td>12,500 15,000 w/SD system</td>
</tr>
</tbody>
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- Increase to 12,500 sq ft not permitted until 2015 editions
- Need to meet most restrictive code
Suite or Sour?

• Emergency department requires a suite (no doors on treatment bays)
• Total area limitations exceeded
• Concerns with access to a corridor

Suite!

• Single-story area of building
• Previous building exterior could be upgraded to a horizontal exit

Suite or Sour?

• ED Treatment rooms
• Non-latching doors
• Oversized non-sleeping suite (13,440 sq ft)
• SOUR!
  • Needed equivalency
  • Don’t design in the hopes of getting an equivalency
Non-Patient Care Suites

- 2012 LSC §18.2.5.7.4
  - “Egress...in accordance with the use and occupancy of the space”
- Not included in IBC

Impact of Suites

- Improves speed of care delivery
  - Not subject to all requirements for corridors or individual patient rooms
  - Allows for placement of patient care equipment closer to patient rooms

Impact of Suites

- Requires increase in life safety criteria
  - Direct visual oversight
  - Smoke detection
  - Separation from other areas
FGI Guidelines

• Suites are a multi-patient “room”
  • 100 sq ft clear area per patient for single bed rooms
  • 60 sq ft clear area per patient when bays are utilized
• Consider required space of other elements of care
  • Equipment
  • Bed/cart movement

Authorities Having Jurisdiction

• How does your AHJ interpret the code?
• How to determine the “Sweetest” course of action?

Authorities Having Jurisdiction

• Questions to ask your AHJ:
  • What are your restrictions for utilizing suites?
  • What are your expectations for suite circulating space?
  • Does the corridor require the 8 ft clear width?
  • Is storage of equipment or supplies allowed?
Suite Implications

- Construction cost
- Day-to-day storage
- Operations within the suite
- Challenges/benefits to clinical staff
- Implications for future building maintenance

Key Considerations in New Suite Design

- Remaining corridor access when suite is created
- Access to exits
- Travel distance to an exit access corridor
- Suite boundaries - partitions and latches

Questions
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