



# **The 2018 FGI *Guidelines***

*Proposed Revisions to Procedure, Operating,  
and Imaging Room Requirements*

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The views and opinions expressed in this presentation are the opinion of the speakers and not the official position of FGI or the Health Guidelines Revision Committee.

## PROPOSED CHANGES TO SURGERY SECTIONS

Clarification of **procedure room** and **operating room** requirements intended to support space for equipment and staff present for procedures provided

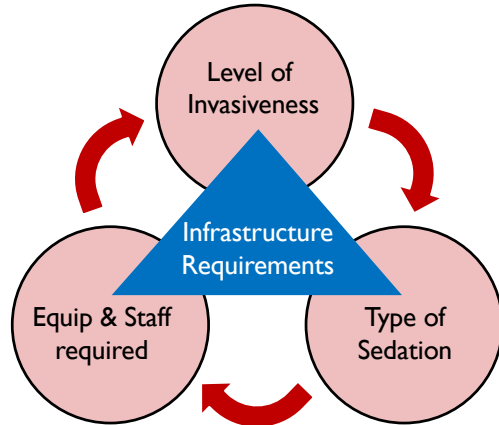
|   |                       |
|---|-----------------------|
| <b>Section 2.1-3.2.2 (H) and 3.8-3.1 (OP)</b> | Procedure Room        |
| <b>Section 2.1-3.2.3 (H) and 3.7-3.4 (OP)</b> | Operating Room        |
| <b>Section 2.2-3.3.4 (H)</b>                  | Hybrid Operating Room |

New classification structure for **imaging rooms** based on procedures performed and environmental controls needed to allow flexibility in imaging room requirements as procedures and equipment change over time

|   |               |
|---|---------------|
| <b>Section 2.2-3.4.1.2 (H) and 2.1-3.5.2 (OP)</b> | Imaging Rooms |
| <b>Table 2.2-2 (H)</b>                            |               |

## 2018 FGI PROCEDURES

An understanding of the following is required to inform the planning of diagnostic, surgical, and interventional spaces.



- *Level of **invasiveness**, likelihood of infection*
- *Type of **sedation** used to conduct procedure*
- *Number of **staff** expected in the room during procedure*
- ***Equipment** needed to support procedure*

Which, in turn, determine the design requirements:

- *Room **classification***
  - Procedure room (formerly Class A)*
  - Operating room (formerly Class B & C)*
  - Type of Imaging room (new Class 1, 2, and 3)*
- *Room **size***
- *Room **finishes***
- *Room **Infrastructure (MEP systems)***

## INVASIVE PROCEDURE

A procedure that is performed in an aseptic surgical field and penetrates the protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea).

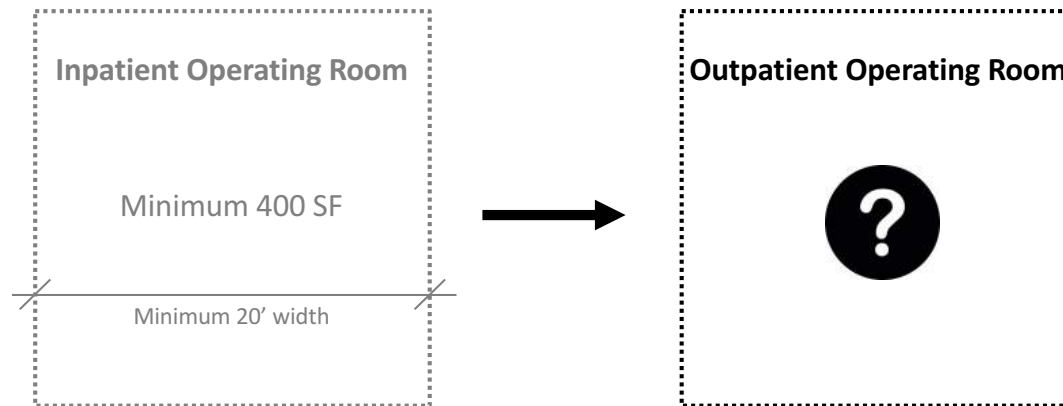
An invasive procedure may fall into one or more of the following categories:

- Requires entry into or opening a sterile body cavity  
(i.e., cranium, chest, abdomen, pelvis, joint spaces)
- Involves insertion of an indwelling foreign body
- Includes excision and grafting of burns that cover more than 20 percent of total body area
- Does not begin as an open procedure but has a risk, as determined by the physician, of requiring conversion to an open procedure

## 2018 GUIDELINES OBJECTIVE

- To make it easier for designers to know when what type of room is acceptable
- To make it easier for designers to right-size procedure and operating rooms

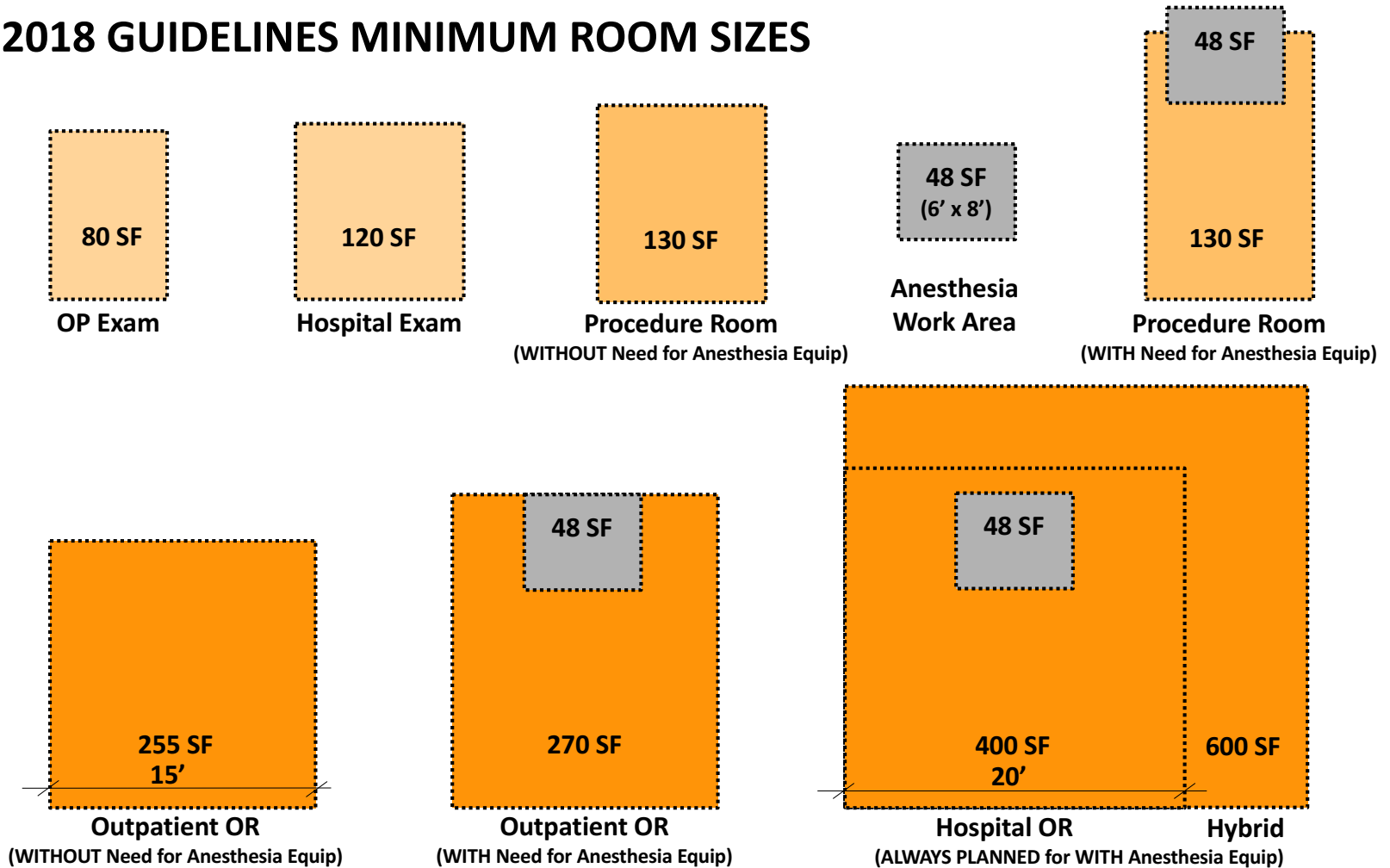
Task group concerns and discussions included increasing patient acuity and complexity of outpatient surgical procedures, growing number of 23-hour-stay post-procedure outpatient services, and need for consistency and standards for environments



## THREE MAJOR TYPES OF ROOMS....

|          | Procedure Room Type                 | Imaging Room Type                               | Use   |
|----------|-------------------------------------|---|---|
| <b>1</b> | <b>Exam/<br/>Treatment<br/>Room</b> | <b>Class 1<br/>Imaging<br/>Room</b>             | A room designated for the performance of patient care that may require high-level disinfected or sterile instruments but is <b>not required to be performed with the environmental controls of a procedure room.</b>  |
| <b>2</b> | <b>Procedure<br/>Room</b>           | <b>Class 2<br/>Imaging<br/>Room</b>             | A room designated for the performance of patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but is not required to be performed with the environmental controls of an operating room.</b>   |
| <b>3</b> | <b>Operating<br/>Room</b>           | <b>Class 3<br/>Imaging room<br/>(Hybrid OR)</b> | A room that meets the requirements of a restricted area, is designated and equipped for performing surgical or other invasive procedures, and has the <b>environmental controls for an OR as indicated in ASHRAE 170.</b> An aseptic field is required for all procedures performed in an OR. |

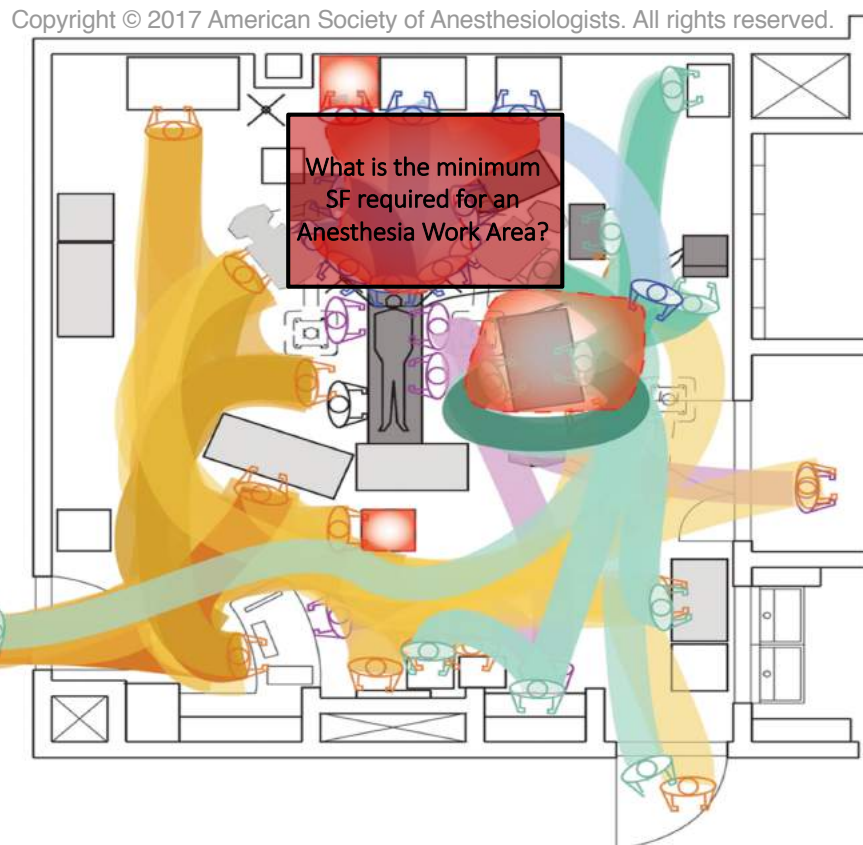
# 2018 GUIDELINES MINIMUM ROOM SIZES





# STUDY BY AMERICAN SOCIETY OF ANESTHESIOLOGISTS

## Operating Room Architectural Flow Diagram



-  Nurses
-  Anesthesiologists
-  Surgeons
-  Perfusionists

**ANESTHESIOLOGY**  
The Journal of the American Society of Anesthesiologists, Inc.

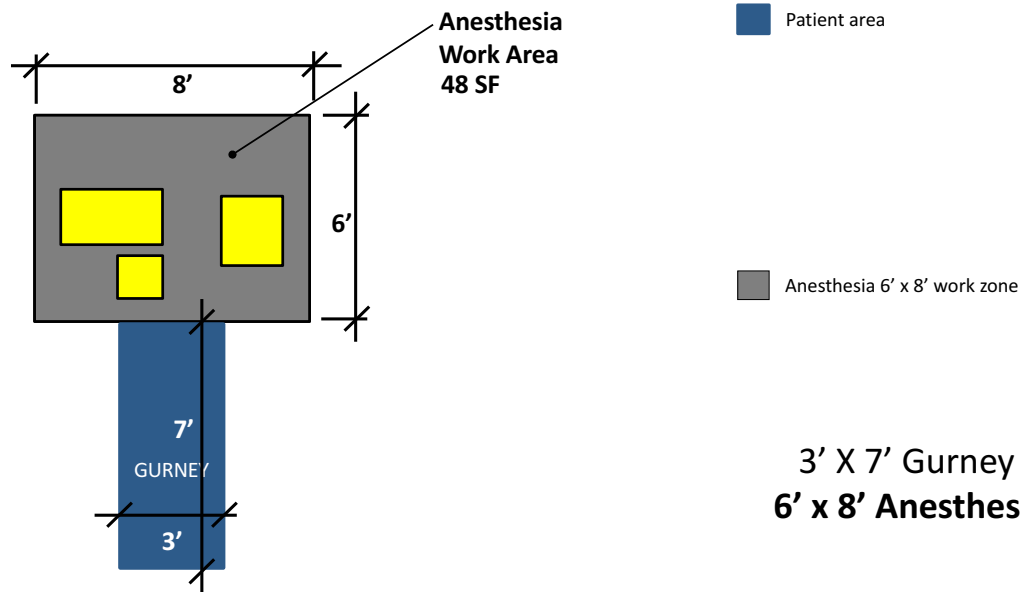
**Realizing Improved Patient Care through Human-centered Operating Room Design:**

*A Human Factors Methodology for Observing Flow Disruptions in the Cardiothoracic Operating Room*

Anesthesiology. 2013;119(5):1066-1077.  
doi:10.1097/ALN.0b013e31829f68cf

# CLEARANCE ZONE DIAGRAM

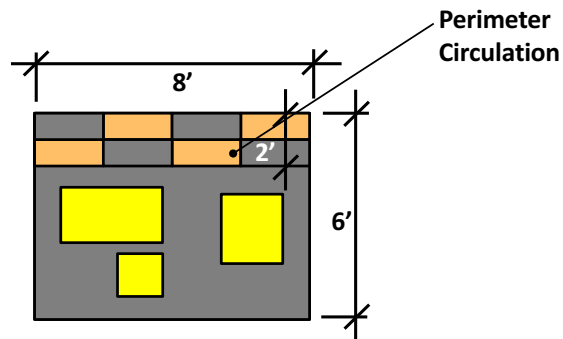
## Establishing the Anesthesia Work Area



3' X 7' Gurney for planning purposes  
**6' x 8' Anesthesia Work Zone at Head**

# CLEARANCE ZONE DIAGRAM

## Establishing the Anesthesia Work Area



The anesthesia work zone is a **6' x 8' space** at the head of the table, but when the anesthesia care provider(s) are not actively setting up sedation of the patient **2' at the top of that zone** can be used as part of the circulator pathway.

Any room (Exam, Treatment, or Imaging rooms) where general anesthesia will be administered using an anesthesia machine and supply carts shall have **48 square feet** at the head of the table, gurney, or chair for an anesthesia work zone.

- Anesthesia 6' x 8' work zone
- Gray and White area is 2' area shared between anesthesia and circulator.

**6' x 8' Anesthesia Work Zone at Head  
2' x 8' at Perimeter, may serve as Circulation**

# ROOM CLASSIFICATION

| Room Type                                       | Use   | Environmental Controls   |   |   |
|---|---|--|---|---|
|   |   | Location   | Ventilation   | Surfaces  |
| <b>Exam Room</b><br>or<br><b>Treatment Room</b> | Patient care that may require high-level disinfected or sterile instruments <b>but does not require the environmental controls of a procedure room</b>                                | Accessed from an <b>unrestricted</b> area                      | <p><b>4 total ACH</b> for general exam room</p> <p><b>6 total ACH</b> for exam rooms programmed for use by patients with undiagnosed gastrointestinal symptoms, respiratory symptoms, or skin symptoms</p> <p>No pressure requirement</p> <p>Standard diffuser and return array</p>   | <p><b>Ceilings:</b> Cleanable with routine housekeeping equipment</p> <p><b>Floor:</b> No special requirement</p> <p><b>Walls:</b> No special requirement</p>   |
| <b>Procedure Room</b>                           | Patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but does not require the environmental controls of an operating room</b> | Accessed from an <b>unrestricted</b> or a semi-restricted area | <p><b>15 ACH / Positive pressure</b></p> <p>Standard diffuser and return array</p>  | <p><b>Ceilings:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles. Lay-in ceiling permitted if gasketed or each ceiling tile weighs at least 11b/SF</p> <p><b>Floor and wall base assemblies for cystoscopy, urology, and endoscopy procedure rooms:</b> Monolithic with an integral coved wall base that is carried up the wall a minimum of 6"</p> <p><b>Wall finishes for endoscopy:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p> |
| <b>Operating Room</b>                           | <b>Invasive procedures*</b><br>Any procedure during which the patient will require <b>physiological monitoring and is anticipated to require active life support</b>                  | Accessed from a <b>semi-restricted area</b>                    | <p><b>20 total ACH / Positive pressure</b></p> <p>Primary supply diffuser array extend a minimum of 12' beyond the footprint of the surgical table on each side</p> <p>At least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible</p> | <p><b>Ceilings:</b> Monolithic, scrubable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings</p> <p><b>Floor and wall base assemblies:</b> Monolithic with an integral coved wall base that is carried up the wall a minimum of 6"</p> <p><b>Wall finishes:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p>   |

## EXAMINATION ROOM

A room with a bed, stretcher, or examination table and capability for periodic monitoring (e.g., measurement of blood pressure or pulse oximetry) **in which procedures that do not require a specialized suite can be performed** (e.g., pelvic examination).

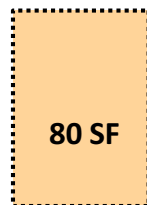
## TREATMENT ROOM

A standard patient room in an emergency department (ED) or urgent care center that may be used for a variety of functions, including patient examination and various treatments or procedures, including wound packing, suture placement, or casting. This room may contain specialized equipment as identified in the functional program.

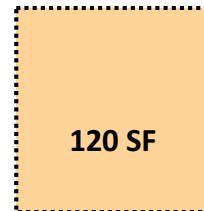


# EXAM ROOM CLASSIFICATION

| Room Type                                       | Use  | Environmental Controls                    |  |  |
|---|--|---|--|--|
|   |  | Location                                  | Ventilation  | Surfaces   |
| <b>Exam Room</b><br>or<br><b>Treatment Room</b> | Patient care that may require high-level disinfected or sterile instruments <b>but does not require the environmental controls of a procedure room</b> | Accessed from an <b>unrestricted</b> area | <b>4 total ACH</b> for general exam room<br><b>6 total ACH</b> for exam rooms programmed for use by patients with undiagnosed gastrointestinal symptoms, respiratory symptoms, or skin symptoms<br>No pressure requirement<br>Standard diffuser and return array | <b>Ceilings:</b> Cleanable with routine housekeeping equipment<br><b>Floor:</b> No special requirement<br><b>Walls:</b> No special requirement |



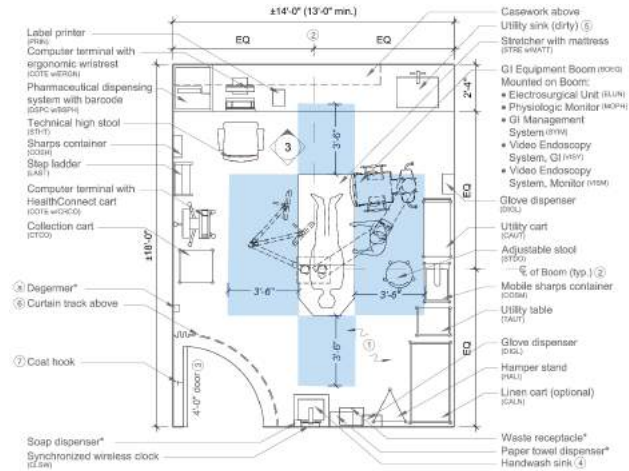
**OP Exam**



**Hospital Exam**

# PROCEDURE ROOM

A room designated for the performance of patient care that requires high-level disinfection or sterile instruments and some environmental controls **but is not required to be performed with the environmental controls of an operating room.**



# ROOM CLASSIFICATION

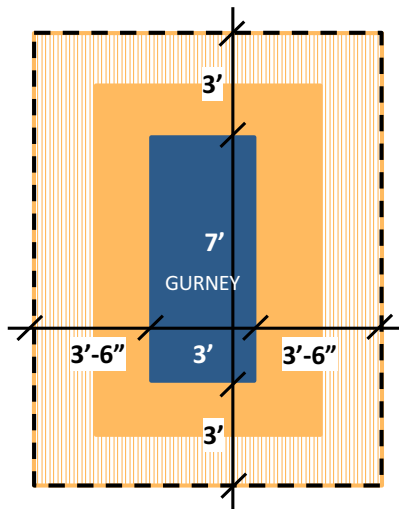
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| <b>Procedure Room</b>                           | Patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but does not require the environmental controls of an operating room</b> | Accessed from an <b>unrestricted</b> or a semi-restricted area | <p><b>15 ACH / Positive pressure</b></p> <p>Standard diffuser and return array</p>  | <p><b>Ceilings:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles. Lay-in ceiling permitted if gasketed or each ceiling tile weighs at least 11b/SF</p> <p><b>Floor and wall base assemblies for cystoscopy, urology, and endoscopy procedure rooms:</b> Monolithic with an integral coved wall base that is carried up the wall a minimum of 6"</p> <p><b>Wall finishes for endoscopy:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p> |




# CLEARANCE ZONE DIAGRAM PROCEDURE ROOM – INPATIENT & OUTPATIENT (WITHOUT Need for Anesthesia Equipment)

## PROCEDURE ROOM ZONES W/O NEED FOR ANESTHESIA EQUIP

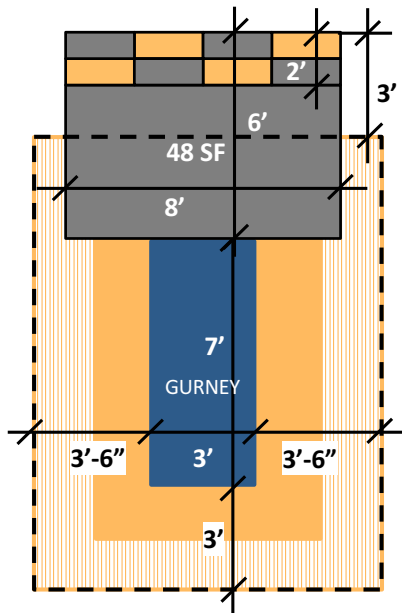
- Patient area
- Circulation pathway where the circulator walks to perform duties. Cannot walk into sterile field.
- Movable equipment zone where the required movable equipment is stored and provides for door swing and opening of fixed drawers or opening of door and drawers on carts



 CFA Clear Floor Area - 130 SF

**3'-0" Clearance at Head & Foot**  
**3'-6" Clearance at Sides**  
**130 SF CFA**

# CLEARANCE ZONE DIAGRAM PROCEDURE ROOM – INPATIENT & OUTPATIENT (WITH Need for Anesthesia Equipment)



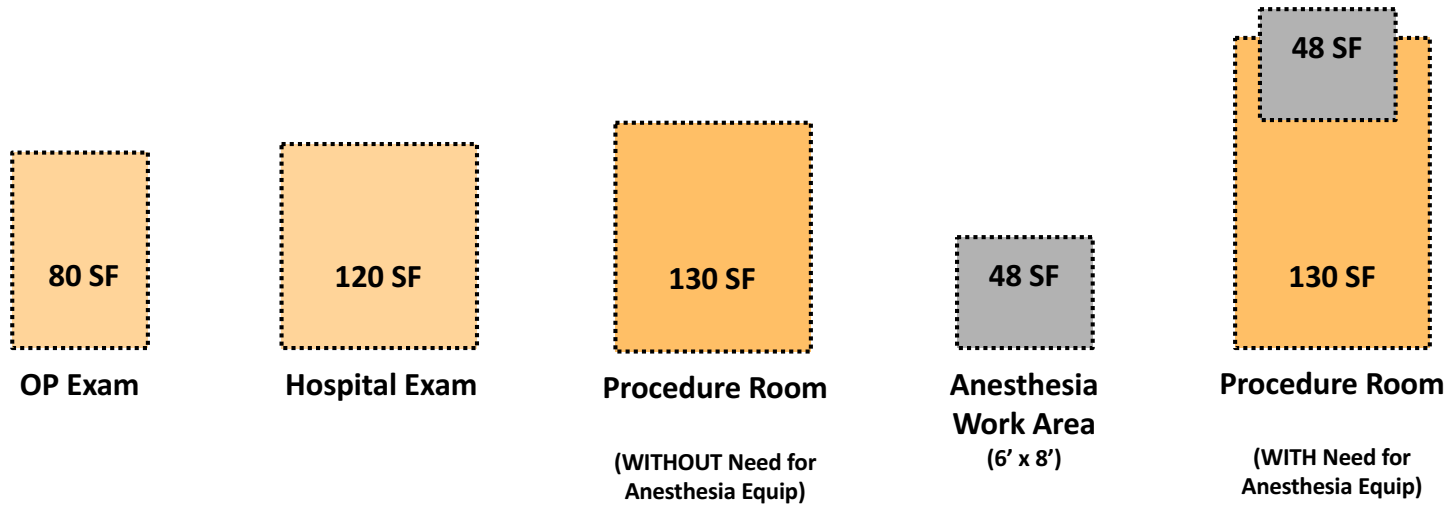
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- Patient area
- Circulation pathway where the circulator walks to perform duties. Cannot walk into sterile field.
- Movable equipment zone where the required movable equipment is stored and provides for door swing and opening of fixed drawers or opening of door and drawers on carts
- Anesthesia 6' x 8' work zone
- Gray and White area is 2' area shared between anesthesia and circulator.
- CFA Clear Floor Area - 130 SF

3' X 7' Gurney for planning purposes  
 6' x 8' Anesthesia Work Zone at Head  
 2' x 8' at Perimeter, may serve as Circulation  
**3'-0" Clearance at Head & Foot, 3'-6" Clearance at Sides**  
**130 SF CFA + 24 SF (3' x 8')**

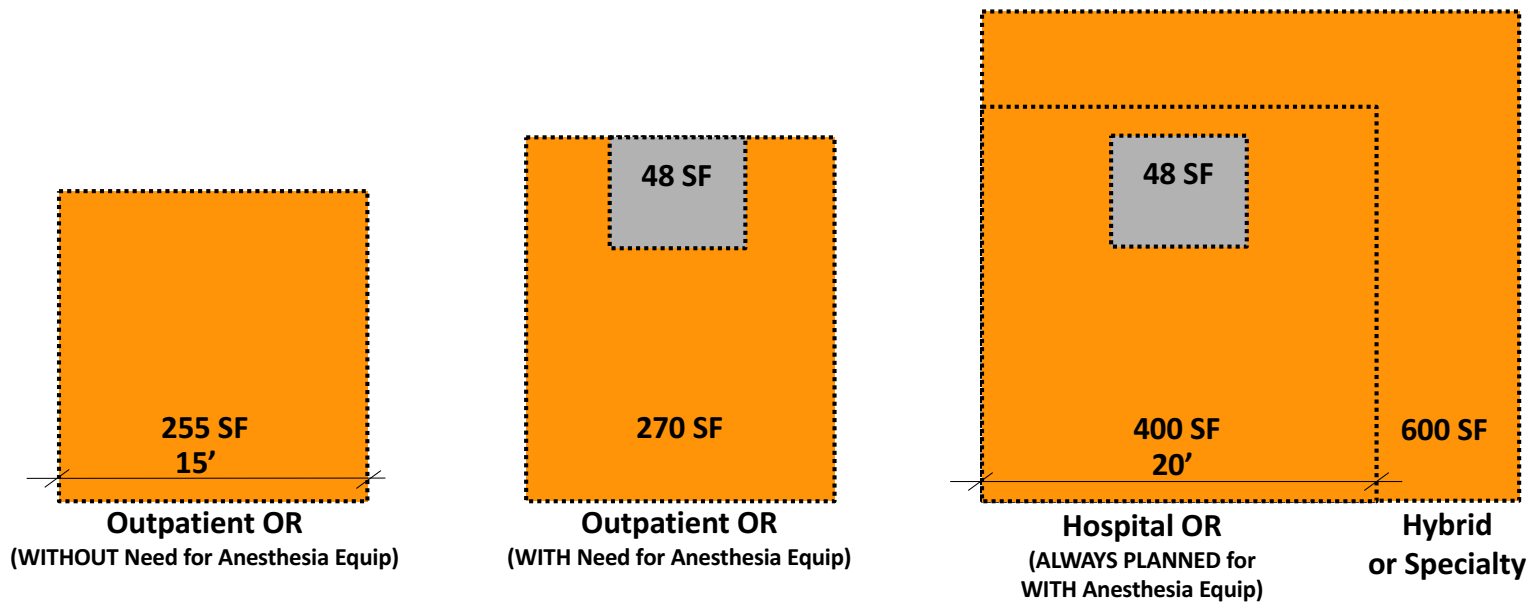
# 2018 GUIDELINES MINIMUM ROOM SIZES

## Exam, Treatment & Procedure Rooms



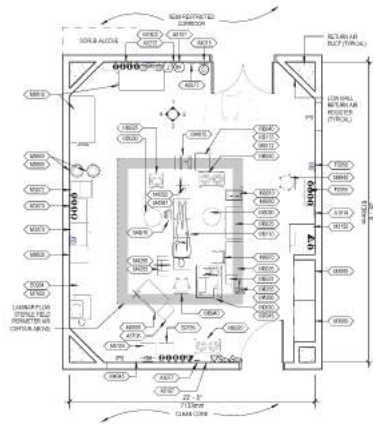
# 2018 GUIDELINES MINIMUM ROOM SIZES

## Operating Rooms



# OPERATING ROOM

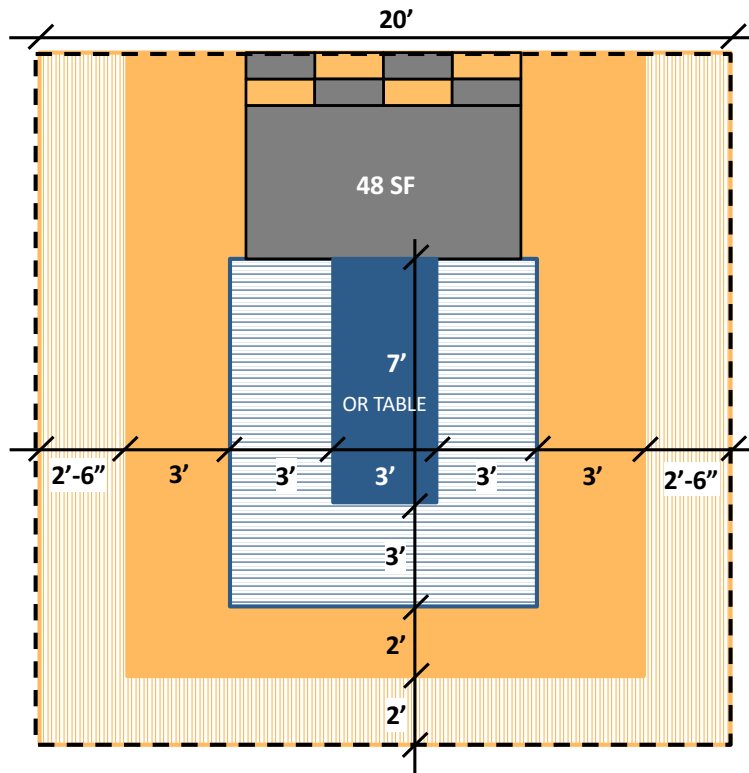
A room that meets the requirements of a restricted area, is designated and equipped for performing surgical or other invasive procedures, and has the **environmental controls** for an OR as indicated in ASHRAE 170. An aseptic field is required for all procedures performed in an OR.



# ROOM CLASSIFICATION

| Room Type                                       | Use   | Environmental Controls   |   |   |
|---|---|--|---|---|
|   |   | Location   | Ventilation   | Surfaces  |
| <b>Exam Room</b><br>or<br><b>Treatment Room</b> | Patient care that may require high-level disinfected or sterile instruments <b>but does not require the environmental controls of a procedure room</b>                                | Accessed from an <b>unrestricted</b> area                      | <p><b>4 total ACH</b> for general exam room</p> <p><b>6 total ACH</b> for exam rooms programmed for use by patients with undiagnosed gastrointestinal symptoms, respiratory symptoms, or skin symptoms</p> <p>No pressure requirement</p> <p>Standard diffuser and return array</p>   | <p><b>Ceilings:</b> Cleanable with routine housekeeping equipment</p> <p><b>Floor:</b> No special requirement</p> <p><b>Walls:</b> No special requirement</p>   |
| <b>Procedure Room</b>                           | Patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but does not require the environmental controls of an operating room</b> | Accessed from an <b>unrestricted</b> or a semi-restricted area | <p><b>15 ACH / Positive pressure</b></p> <p>Standard diffuser and return array</p>  | <p><b>Ceilings:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles. Lay-in ceiling permitted if gasketed or each ceiling tile weighs at least 11b/SF</p> <p><b>Floor and wall base assemblies for cystoscopy, urology, and endoscopy procedure rooms:</b> Monolithic with an integral covered wall base that is carried up the wall a minimum of 6"</p> <p><b>Wall finishes for endoscopy:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p> |
| <b>Operating Room</b>                           | <p><b>Invasive procedures*</b></p> <p>Any procedure during which the patient will require <b>physiological monitoring and is anticipated to require active life support</b></p>       | Accessed from a <b>semi-restricted area</b>                    | <p><b>20 total ACH / Positive pressure</b></p> <p>Primary supply diffuser array extend a minimum of 12' beyond the footprint of the surgical table on each side</p> <p>At least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible</p> | <p><b>Ceilings:</b> Monolithic, scrubable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings</p> <p><b>Floor and wall base assemblies:</b> Monolithic with an integral covered wall base that is carried up the wall a minimum of 6"</p> <p><b>Wall finishes:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p>   |

# CLEARANCE ZONE DIAGRAM OPERATING ROOM – INPATIENT



## INPATIENT OPERATING ROOM

- Patient area
- Sterile field where scrub and physician work
- Circulation pathway where the circulator walks to perform duties. Cannot walk into sterile field.
- Movable equipment zone where the required movable equipment is stored and provides for door swing and opening of fixed drawers or opening of door and drawers on carts
- Anesthesia 6' x 8' work zone
- Gray and White area is 2' area shared between anesthesia and circulator.
- CFA Clear Floor Area - 400 SF

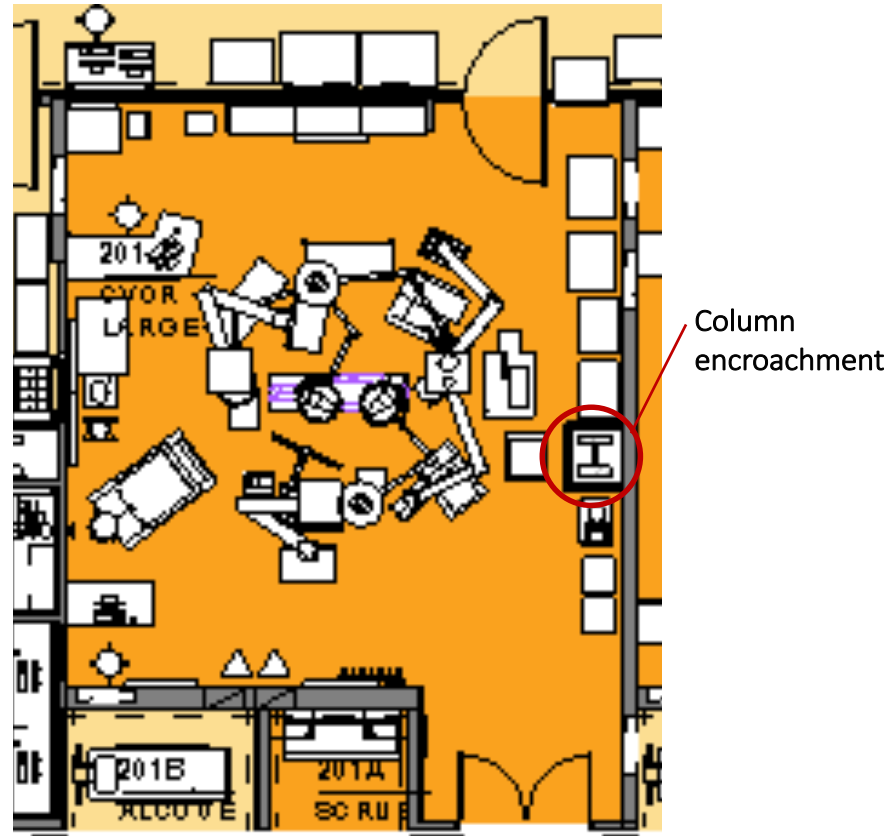
3' X 7' Gurney for planning purposes  
 3' at Sides & Foot – Sterile Field  
 3' at Sides, 2' at Foot – Circulation  
 2'-6" at Sides, 2' at Foot – Equipment  
**20' Minimum Width, 400 SF Minimum CFA**

## CFA & CLEARANCE ALLOWANCE

Revised text in 2018 FGI in order to acknowledge inevitable encroachments and other intrusions to space.

Fixed encroachments shall be permitted to be included when determining minimum CFA requirements for an OR provided:

- 1) There are no encroachments into the sterile field
- 2) The encroachments **do not extend more than 12 inches** into minimum CFA outside the sterile field
- 3) The encroachment width along each wall **does not exceed 10 percent** of the length of that wall





## **OPERATING ROOM - OUTPATIENT WITHOUT Need for Anesthesia Equipment**

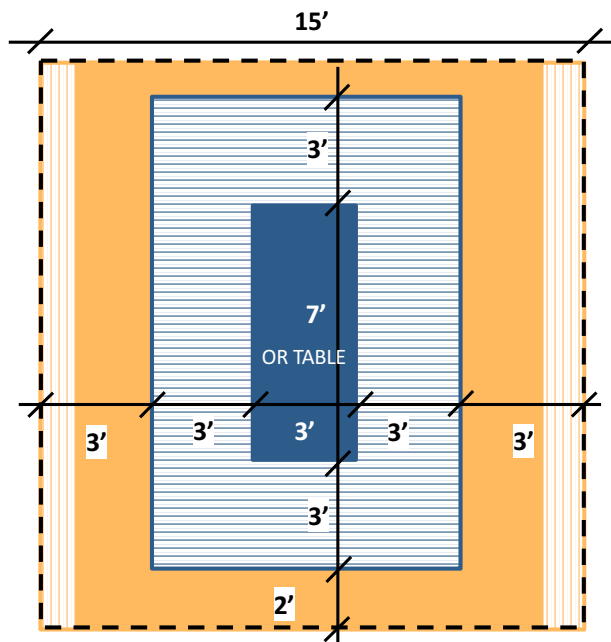
Procedures (100s of) that may be performed in an OR environment but may only require **Local Anesthesia** (numbing medication), and do not necessarily have need for extensive anesthesia equipment:

- Small excision
- Cosmetic procedures
- Eyebrow lift
- Blepharoplasty
- Podiatry
- Hammertoe correction

Procedures that are typically performed in an OR environment but may only require **Local w/ Sedation (MAC – Monitored Anesthesia Care)** and do not necessarily have need for anesthesia extensive equipment:

- Carpal tunnel
- Cataract removal
- Cystoscopy
- Hysteroscopy
- Bunionectomy
- Hand procedures
- Excisions of small mass

# CLEARANCE ZONE DIAGRAM OPERATING ROOM – OUTPATIENT (WITHOUT Need for Anesthesia Equipment)



## OUTPATIENT OR ZONES W/O NEED FOR ANESTHESIA EQUIPMENT

- Patient area
- Sterile field where scrub and physician work
- Circulation pathway and movable equipment zone
- CFA Clear Floor Area - 250 SF

3' X 7' Gurney for planning purposes  
 3' at Sides & 3' Foot & Head – Sterile Field  
**3' at Sides & 2' Foot – Circ. & Equip**  
**15' Minimum Width, 255 SF Minimum CFA**

## **OPERATING ROOM - OUTPATIENT WITH Need for Anesthesia Equipment**

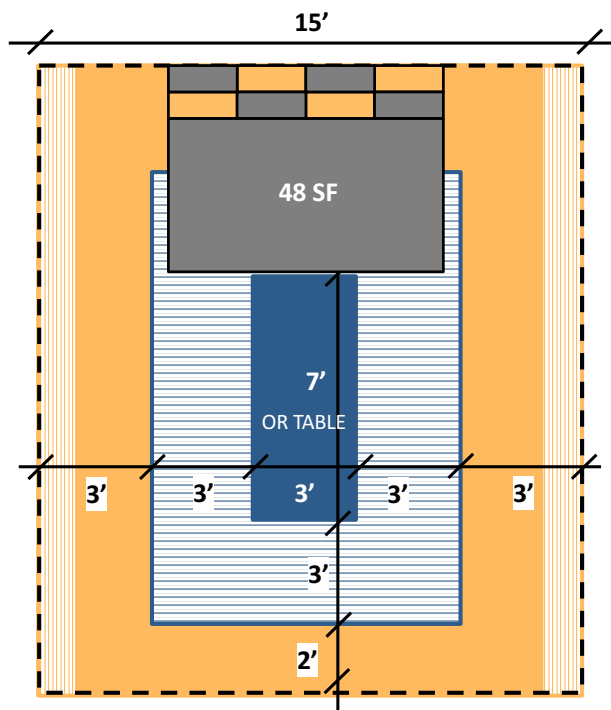
Procedures that are typically performed in an OR environment but could use general medication propofol or mask, but have a **greater risk of requiring emergency care** where access to full anesthesia care and equipment is advised:

- Breast augmentation
- Mini tummy tuck
- Knee arthroscopy
- Laparoscopy
- Cysto with holmium laser lithotripsy

Procedures that are typically performed in an OR environment requiring “intubation” or using gas anesthesia (sevoflurane) requiring anesthesia machine with vent capability:

- Extended abdominoplasty
- Shoulder arthroscopy
- Partial knee replacement
- Spinal fusion
- Pediatric tonsillectomy

# CLEARANCE ZONE DIAGRAM OPERATING ROOM – OUTPATIENT (WITH Need for Anesthesia Equipment)



## OUTPATIENT OR ZONES WITH NEED FOR ANESTHESIA EQUIPMENT

- Patient area
- Sterile field where scrub and physician work
- Circulation pathway and movable equipment zone
- CFA Clear Floor Area - 270 SF

3' X 7' Gurney for planning purposes  
 3' at Sides & 3' Foot & Head – Sterile Field  
**6' x 8' Anesthesia Work Zone at Head**  
**3' at Sides & 2' at Foot – Circ. & Equip**  
 15' Minimum Width, **270 SF Minimum CFA**

# IMAGING ROOM CLASSIFICATION

| Room Type   | Use   | Environmental Controls  |  |  |
|---|---|---|--|--|
|   |   | Location  | Ventilation  | Surfaces   |
| <b>Class 1 Imaging Room</b>                         | <ul style="list-style-type: none"> <li>Diagnostic radiography, fluoroscopy, mammography, computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), and other imaging modalities</li> <li>Services that utilize natural orifice entry and do not pierce or penetrate natural protective membranes</li> </ul> | Accessed from an <b>unrestricted</b> area                             | <p><b>6 total ACH</b></p> <p>No pressure requirement</p> <p>Standard diffuser and return array</p>   | <p><b>Ceilings:</b> Cleanable with routine housekeeping equipment; lay-in ceiling permitted</p> <p><b>Floor:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant</p> <p><b>Walls:</b> Washable</p>   |
| <b>Class 2 Imaging Room</b>                         | <ul style="list-style-type: none"> <li>Diagnostic and therapeutic procedures such as coronary, neurological, or peripheral angiography</li> <li>Electrophysiology procedures</li> </ul>   | Accessed from an <b>unrestricted</b> or a <b>semi-restricted</b> area | <p><b>15 total ACH</b></p> <p>Positive pressure for catheterization</p> <p>No pressure requirements for other rooms</p> <p>Standard diffuser and return array</p>  | <p><b>Ceiling:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles</p> <p><b>Flooring:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant</p> <p><b>Floor and wall base assemblies:</b> Monolithic floor with integral covered wall base carried up the wall a minimum of 6 inches</p> <p><b>Wall finishes:</b> Washable; free of fissures, open joints, or crevices</p> |
| <b>Class 3 Imaging room (Hybrid Operating Room)</b> | <ul style="list-style-type: none"> <li><b>Invasive</b> procedures*</li> <li>Any Class 2 procedure during which the patient will require physiological monitoring and is anticipated to require active life support</li> </ul>   | Accessed from a <b>semi-restricted</b> area                           | <p><b>20 total ACH, Positive pressure</b></p> <p>Primary supply diffuser array extend a minimum of 12' beyond the footprint of the surgical table on each side</p> <p>At least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible</p> | <p><b>Ceiling:</b> Monolithic, scrubable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings</p> <p><b>Flooring:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant</p> <p><b>Floor and wall base assemblies:</b> Monolithic floor with integral covered wall base carried up the wall a minimum of 6 inches</p> <p><b>Wall finishes:</b> Washable; free of fissures, open joints, or crevices</p>  |

## IMAGING ROOM CLASSIFICATION

An imaging room is a room in which **imaging services are provided.**

Depending on what takes place within the imaging room, the room maybe used for diagnostic, therapeutic, or invasive procedures, and as such should be designed to the same standards as required for those same procedures to take place in non-imaging settings.

Proposed new classification system for Imaging rooms.



# COMPARISON

## Exam/Treatment Room & Class 1 Imaging Room

| Room Type                                       | Use  | Environmental Controls                    |   |  |
|---|--|---|---|--|
|   |  | Location                                  | Ventilation   | Surfaces   |
| <b>Class 1 Imaging Room</b>                     | <p>Diagnostic radiography, fluoroscopy, mammography, computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), and other imaging modalities</p> <p>Services that utilize natural orifice entry and do not pierce or penetrate natural protective membranes</p> | Accessed from an <b>unrestricted</b> area | <p><b>6 total ACH</b></p> <p>No pressure requirement</p> <p>Standard diffuser and return array</p>  | <p><b>Ceilings:</b> Cleanable with routine housekeeping equipment; lay-in ceiling permitted</p> <p><b>Floor:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant</p> <p><b>Walls:</b> Washable</p> |
| <b>Exam Room</b><br>OR<br><b>Treatment Room</b> | <p>Patient care that may require high-level disinfected or sterile instruments <b>but does not require the environmental controls of a procedure room</b></p>  |   | <p><b>4 total ACH</b> for general exam room</p> <p><b>6 total ACH</b> for exam rooms programmed for use by patients with undiagnosed gastrointestinal symptoms, respiratory symptoms, or skin symptoms</p> <p>No pressure requirement</p> <p>Standard diffuser and return array</p> | <p><b>Ceilings:</b> Cleanable with routine housekeeping equipment</p> <p><b>Floor:</b> No special requirement</p> <p><b>Walls:</b> No special requirement</p>  |

# COMPARISON

## Procedure Room & Class 2 Imaging Room

| Room Type                   | Use  | Environmental Controls   |   |   |
|-----------------------------|--|--|---|---|
|                             |  | Location   | Ventilation   | Surfaces  |
| <b>Class 2 Imaging Room</b> | <p>Diagnostic and therapeutic procedures such as coronary, neurological, or peripheral angiography</p> <p>Electrophysiology procedures</p>   | <p>Accessed from an <b>unrestricted</b> or a <b>semi-restricted</b> area</p> | <p><b>15 total ACH</b></p> <p>Positive pressure for catheterization</p> <p>No pressure requirements for other rooms</p> <p>Standard diffuser and return array</p> | <p><b>Ceiling:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles</p> <p><b>Flooring:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant</p> <p><b>Floor and wall base assemblies:</b> Monolithic floor with integral covered wall base carried up the wall a minimum of 6 inches</p> <p><b>Wall finishes:</b> Washable; free of fissures, open joints, or crevices</p>  |
| <b>Procedure Room</b>       | <p>Patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but does not require the environmental controls of an operating room</b></p> |  | <p><b>15 ACH</b></p> <p>Positive pressure</p> <p>Standard diffuser and return array</p>   | <p><b>Ceilings:</b> Smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals; without crevices; lay-in ceiling permitted if gasketed or each ceiling tile weighs at least one pound per square foot and no perforated, tegular, serrated, or highly textured tiles. Lay-in ceiling permitted if gasketed or each ceiling tile weighs at least 1lb/SF</p> <p><b>Floor and wall base assemblies for cystoscopy, urology, and endoscopy procedure rooms:</b> Monolithic with an integral covered wall base that is carried up the wall a minimum of 6'</p> <p><b>Wall finishes for endoscopy:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles</p> |



## HYBRID OPERATING ROOM

A room that meets the definition of an operating room and is also equipped to enable diagnostic imaging before, during, and after surgical procedures.

Imaging equipment is permanently installed in the room and may include MRI, fixed single-plane and bi-plane tomographic imaging systems, and computed tomography equipment.

**Note:**

Use of portable imaging technology does not make an OR a hybrid operating room.



# COMPARISON

## Operating Room & Class 3 Imaging Room

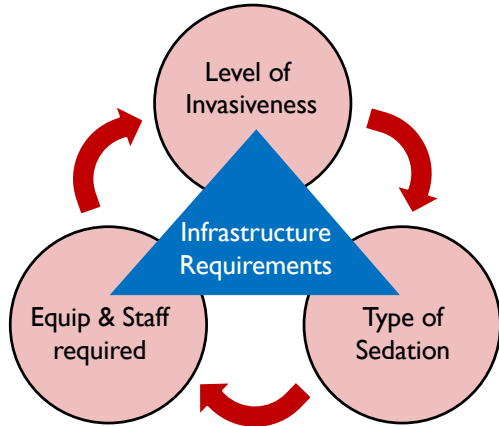
| Room Type   | Use   | Environmental Controls                      |   |   |
|---|---|---|---|---|
|   |   | Location                                    | Ventilation   | Surfaces  |
| <b>Class 3 Imaging room (Hybrid Operating Room)</b> | <b>Invasive procedures*</b><br>Any <b>Class 2 procedure</b> during which the patient will require <b>physiological monitoring and is anticipated to require active life support</b> | Accessed from a <b>semi-restricted</b> area | <b>20 total ACH, Positive pressure</b><br><br>Primary supply diffuser array extend a minimum of 12' beyond the footprint of the surgical table on each side<br><br>At least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible | <b>Ceiling:</b> Monolithic, scrubbable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings<br><br><b>Flooring:</b> Cleanable and wear-resistant for the location; stable, firm, and slip-resistant<br><br><b>Floor and wall base assemblies:</b> Monolithic floor with integral coved wall base carried up the wall a minimum of 6 inches<br><br><b>Wall finishes:</b> Washable; free of fissures, open joints, or crevices |
| <b>Operating Room</b>                               | <b>Invasive procedures*</b><br>Any <b>procedure</b> during which the patient will require <b>physiological monitoring and is anticipated to require active life support</b>         |   |   | <b>Ceilings:</b> Monolithic, scrubbable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings<br><br><b>Floor and wall base assemblies:</b> Monolithic with an integral coved wall base that is carried up the wall a minimum of 6'<br><br><b>Wall finishes:</b> Free of fissures, open joints, or crevices that may retain or permit passage of dirt particles   |

## THREE MAJOR TYPES OF ROOMS....

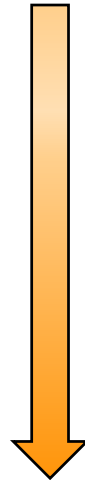
|          | Procedure Room Type                 | Imaging Room Type                               | Use   |
|----------|-------------------------------------|---|---|
| <b>1</b> | <b>Exam/<br/>Treatment<br/>Room</b> | <b>Class 1<br/>Imaging<br/>Room</b>             | A room designated for the performance of patient care that may require high-level disinfected or sterile instruments but is <b>not required to be performed with the environmental controls of a procedure room.</b>  |
| <b>2</b> | <b>Procedure<br/>Room</b>           | <b>Class 2<br/>Imaging<br/>Room</b>             | A room designated for the performance of patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but is not required to be performed with the environmental controls of an operating room.</b>   |
| <b>3</b> | <b>Operating<br/>Room</b>           | <b>Class 3<br/>Imaging room<br/>(Hybrid OR)</b> | A room that meets the requirements of a restricted area, is designated and equipped for performing surgical or other invasive procedures, and has the <b>environmental controls for an OR as indicated in ASHRAE 170.</b> An aseptic field is required for all procedures performed in an OR. |

# 2018 FGI PROCEDURES – SUMMARY

## Type of Room

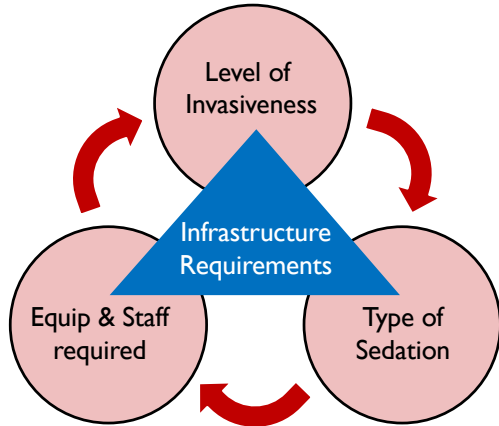


|          | Level of Invasiveness | Risk of Infection | Sterility of Environment | Infrastructure Room Finishes |
|----------|-----------------------|-------------------|--------------------------|------------------------------|
| <b>1</b> | Non Invasive          | Low               | Low, 4-6 ACH             | Low                          |
| <b>2</b> | Limited               |                   | 15 ACH                   |                              |
| <b>3</b> | Invasive, Any         | High              | High, 20 ACH             | High                         |



# 2018 FGI PROCEDURES – SUMMARY

## Size of Room



**1**

**2**

**3**

| Number of Staff Req'd | Type of Sedation       | Amount of Equipment | Minimum Room Size      |
|-----------------------|------------------------|---------------------|------------------------|
| Low                   | None                   | Limited             | 80-120 SF              |
|                       | Varies, may be General | 15 ACH              | 130 SF                 |
| High                  | General Anesthesia     | High                | 255 SF OP<br>400 SF IP |

