5 Ways
ICRA 2.0
Impacts
Construction Containment Plans

STARCSystems.com
(888) 307-5346

STARC®

What is ICRA and Why It Matters

ICRA: Infection Control Risk Assessment

ICRA is an assessment process for rating the risk of renovations, construction, or maintenance in a healthcare setting. The American Society for Healthcare Engineering (ASHE) publishes these guidelines. ICRA guidelines were originally written in 1994. In 2021, partially as a response to the pandemic, ASHE refreshed and added to the guidelines. They call these changes ICRA 2.0.

Top 5 ICRA Changes Impacting Temporary Construction Wall Choices

Here are the changes pertaining to modular wall construction that you need to know. Use this chart to determine what precautions you need to take for your next project. ICRA 2.0 adds new requirements and clarification on the following:

1. **Work Spanning Shifts**
2. **Dustless Barrier Construction**
3. **Negative Air and Filtrations**
4. **Temp Walls and NFPA**
5. **NEW! Class V: Anterooms a Must**

Read More At starcsystems.com/blog

ICRA 2.0: Eliminating Guesswork for Safer Healthcare Renovations
5 Cases Using ICRA 2.0: Test Your Understanding

		Type of Activity			
		A Inspection & Non-invasive	**B** Small scale, shorter Minimal dust	**C** Large scale, longer Moderate dust	**D** Major demo & construction
Patient risk	Low Non care areas	I	II	II	III
	Medium Patient support	I	II	III	IV
	High Patient care	I	III	IV	V
	Highest Procedures, Invasive, Highly compromised patients	III	IV	V	V

Work Spanning Shifts Benefits From Hard Barriers

Construction containment becomes more difficult with projects that span multiple shifts. Every time workers go in and out of the construction zone, there is a potential for contamination.

Hard barriers are not technically required by ICRA for projects that continue for multiple days, but it is considered a best practice.

ICRA Recommends:

New ICRA regulations require graduating from Class II to Class III precautions when work spans shifts.

Class III Precautions Must Include:

- "**Active means to prevent airborne dust dispersion** into the occupied areas."
- "**Means for controlling minimal dust dispersion** may include handheld HEPA vacuum devices, polyethylene plastic containment or isolation of work area by closing room door.

Solution: STARC Modular Walls

STARC walls are as fast and more durable than plastic sheeting that can rip and tear, maintaining containment even if there is accidental impact.

Instead of zippers or flaps that can accidentally remain open as people move in and out of the site, solid doors close to maintain containment.

According to our customer feedback, patients also feel more comfortable and safe when there is a hard barrier containing the construction site.

CONTAINMENT 101

Dustless Installation

Hospital acquired infections due to renovation accounts for more than 5,000 deaths per year.[1]

Beyond the danger that dust poses to vulnerable patients, some containment solutions -- like drywall or taped plastic sheeting -- release harmful molds to the air.

ICRA recommends that construction containment should be set up in a way that is completely dustless.

ICRA 2.0 Recommends:

ICRA requires a dustless barrier to achieve Class IV compliance.

Barrier should be, "**affixed to ground or ceiling…secure from movement…with sealed gaps…Seal all penetrations in containment barriers, including floors and ceiling,** using approved materials (UL schedule firestop if applicable for barrier type)."

Solution: STARC Systems Modular Walls and Accessories

STARC modular walls are built with dustless installation in mind. All STARC modular systems (RealWall, LiteBarrier, and FireblockWall) exceed ICRA 2.0 Class IV and V rating for dust containment. Walls are easy to set up and look clean and professional.

- Installment doesn't involve cutting, sawing, or taping – minimizing debris
- Versatile components make it easy to create a seal even with wall irregularities

Jogs in the Wall

Uneven Floors

ICRA Safety

Brace for Stability

Adjustable Heights

Fast Lift & Drop Assembly

[1]What Are The Risks To Inpatients During Hospital Construction Or Renovation?
Amjad Kanj, Yuqing Gao, Ayman O. Soubani
Cleveland Clinic Journal of Medicine Oct 2019, 86 (10) 650-652; DOI: 10.3949/ccjm.86a.19008

Negative Air and Filtration

Negative air and filtration is essential when undergoing large-scale construction in high patient risk areas. These precautions not only keep construction dust and debris contained, but also reduce the potential for infection transmission.

ICRA Recommends:

ICRA 2.0 does not require negative air for Class III, as long as air pressure is negative or neutral.

Negative air is required for Class IV and V.

- "**Negative airflow pattern must be maintained from the entry point to the anteroom and into the construction area.** The airflow must cascade from outside to inside the construction area. The entire construction area must remain negatively pressurized."
- If the exhaust is directed indoors or outdoors within 25 feet of an entrance, **the system must be HEPA filtered.**
- The system must include **digital air pressure monitoring.**

Solution: STARC Negative Air Panels and Pressure Ports

All STARC modular wall systems (RealWall, LiteBarrier, and FireblockWall) come with the option of Negative Air Panels to **meet and exceed ICRA 2.0 Class IV and V requirements.**

Negative Air Panels feature:

- Integrated digital manometer
- Full panel gasketing and seals to maintain negative pressure
- Integrated air exhaust register

Have questions about negative air requirements? Refer to pages 46-47 and page 96 of the ASHE ICRA 2.0 Process Guide.

Fire Safety Standards

Fire safety is essential for any walled structure, including the use of temporary modular walls for construction. NFPA (National Fire Protection Association) provides fire safety guidelines for walls.

There are different guidelines depending on the risk level of fire, and if there is an active sprinkler system in the vicinity.

ICRA Recommends:

ICRA 2.0 **does not introduce new fire safety recommendations.** Instead, it reinforces that you must **"Construct and complete critical barriers meeting NFPA 241 requirements."**

NFPA 241 Requirements:

8.6.2 Temporary Separation Walls.
8.6.2.1 Protection shall be provided to separate an occupied portion of the structure from a portion of the structure undergoing alteration, construction, or demoliton operations when such operations are considered as having a higher level of hazard than the occupied portion of the building.
8.6.2.2 Walls shall have at least a one-hour fire resistance rating.
8.6.2.3 Opening protectives shall have at least a 45-minute fire protection rating.
8.6.2.4* Nonrated walls and opening protectives shall be permitted when an approved automatic sprinkler system is installed.
A. 8.6.2.4 Construction tarps would not be considered appropriate banners or opening protectives.

*As allowed by your AHJ and/or local code.

Solution: STARC FireblockWall or RealWall

FireblockWall™

STARC FireblockWall is the perfect solution if there's a need for one-hour fire rating, and when adjacent to other one-hour rated assemblies. FireblockWall exceeds ASTM E-119 and ASTM E-84 standards for one-hour fire-rated assembly.

RealWall™

STARC RealWall is non-combustible and great for use in an area with an active sprinkler system and when AHJ and local codes allow. RealWall exceeds ASTM E-84 standards for flame and smoke spread.

Always check with your AHJ or Fire Marshall at project start.

ICRA V Anteroom Construction for Class V Compliance

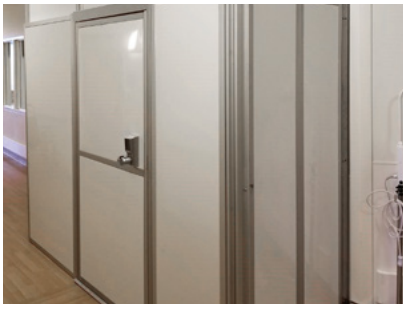
Class V is a new class that ICRA 2.0 defines. This class is for large renovation projects in areas with the highest risk patients. For example, a large-scale renovation near an operating room. These projects call for extra precautions.

ICRA Recommends:

Class V precautions for heavy construction activities near higher risk patients.

In Addition To Class IV Requirements – Must build an anteroom that includes:

- Space for equipment staging and cleaning
- Worker donning/doffing of coveralls
- Adjacent to construction zone
- Maintain negative air cascade to construction entry



Solution: Easily Build Anterooms With STARC Systems

STARC walls are the most versatile to configure and install, with a variety of accessories that make it easy to achieve ICRA Class V with the construction of a negative air anteroom.

All STARC walls (RealWall, LiteBarrier, and FireblockWall) come with the option of:

- Negative air panels & integrated components for maintaining negative pressure
- Wide access doors in three types
- Flexible corners

All STARC Wall Systems Exceed ICRA Class IV And V Rating

RealWall™

- Real wall appearance & stability
- Reduces noise up to 50%
- Unmatched durability

ICRA 2.0 — Exceeds ICRA IV and V Requirements

ASTM E84 Class A Fire & Smoke Rated

LiteBarrier™

- Lightweight
- Very durable
- Lower up-front costs

ICRA 2.0 — Exceeds ICRA IV and V Requirements

ASTM E84 Class A Fire & Smoke Rated

FireblockWall™

- First reusable one-hour fire-rated assembly
- Up to four times faster to install
- Superior noise blocking

1 HOUR — ASTM E119 One-Hour Fire-Rated Assembly

ICRA 2.0 — Exceeds ICRA IV and V Requirements

ASTM E84 Class A Fire & Smoke Rated

Do you know someone who would like a copy of this book?

Contact us today to learn more about how STARC can improve your projects.

www.starcsystems.com
(888) 307-5346

STARC®
UNDISRUPT RENOVATION.™