HEALTHCARE FIRE & LIFE SAFETY COMPLIANCE PLAYBOOK

Aligned to NFPA 99 | NFPA 72 | The Joint Commission
DNV Healthcare | CMS Conditions of Participation

United States Edition 2026

A Resource for Hospital Facilities Directors, Life Safety Officers, and the Consulting Engineers Who Support Them

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A NOTE BEFORE YOU BEGIN

This playbook is not a marketing brochure. It is a working reference document built for the people inside hospitals who are directly accountable for fire and life safety compliance, and for the consulting engineers who design and specify the systems those people depend on.

Hospitals operate on 12–18 month accreditation cycles. The Joint Commission (TJC), DNV Healthcare, and CMS surveyors do not accept "we were not aware." Fire and life safety deficiencies consistently rank among the top findings in hospital surveys, and they are among the most correctable if the right systems and processes are in place before the survey window opens.

Use this playbook as a pre-survey preparation tool, a system specification reference, and a conversation starter with your fire alarm manufacturer and engineering team.

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SECTION 1

THE ACCREDITATION CLOCK (WHY TIMING IS EVERYTHING)

SURVEY CYCLES AT A GLANCE

The Joint Commission (TJC): Every 36 months (unannounced) DNV Healthcare: Annual surveys (on a structured 4-year cycle) CMS Condition of Participation: Complaint-driven + TJC/DNV deemed status State Health Departments: Varies by state, often annual for licensing
The critical insight: TJC surveys are unannounced. Your facility's fire and life safety systems must be survey-ready every day, not just during a scheduled preparation window.

THE COST OF NON-COMPLIANCE

Non-compliance with Life Safety standards is not a paperwork issue.

The consequences cascade quickly:

IMMEDIATE JEOPARDY (IJ) FINDINGS:
The most serious TJC designation. An IJ finding means the hospital's accreditation is at active risk. Facilities have typically 23 calendar days to demonstrate correction, or face loss of accreditation, which triggers loss of Medicare and Medicaid reimbursement.
CONDITION-LEVEL FINDINGS:
Require a written Plan of Correction (PoC) within a defined timeframe. Failure to correct results in escalation to CMS.
STANDARD-LEVEL FINDINGS:
Documented deficiencies that accumulate toward a Condition-level finding if patterns persist across survey cycles.

THE 12–18 MONTH PREPARATION CYCLE

Experienced Life Safety Officers use the period between surveys as a structured preparation cycle:

MONTHS 1–6 (Post-Survey):

- Address all findings from the most recent survey
- Prioritize any cited EC (Environment of Care) and LS (Life Safety) standards
- Commission a gap assessment against current NFPA 99 and NFPA 72 editions

MONTHS 7–12:

- Complete system testing, close documentation gaps, conduct staff training
- Address any deferred maintenance or capital deficiencies
- Conduct a mock survey or self-assessment using TJC's Periodic Performance Review (PPR) tool

MONTHS 12–18 (Pre-Survey Readiness):

- All documentation current and accessible for surveyor request
- All required testing completed, logged, and signed off
- All fire alarm devices, detectors, and notification appliances verified
- Life Safety drawings current and posted at the FACP

KEY PRINCIPLE:

The survey window doesn't create the compliance need, it reveals whether the compliance work has already been done. Systems, not scrambles, create consistently survey-ready facilities.

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SECTION 2

THE REGULATORY FRAMEWORK (WHO SETS THE RULES)

Understanding who has authority, and how the standards relate to each other, is essential before a single device is specified or a single test is scheduled.

THE HIERARCHY OF AUTHORITY

LAYER 1: FEDERAL (CMS)

The Centers for Medicare & Medicaid Services sets the Conditions of Participation that hospitals must meet to receive Medicare and Medicaid reimbursement. CMS adopts NFPA 101 Life Safety Code as the baseline standard for physical environment compliance.

LAYER 2: ACCREDITATION BODIES (DEEMED STATUS)

TJC and DNV Healthcare hold CMS-deemed status, hospitals accredited by these bodies are presumed to meet CMS CoPs without separate federal inspection. Their standards incorporate and expand upon CMS requirements.

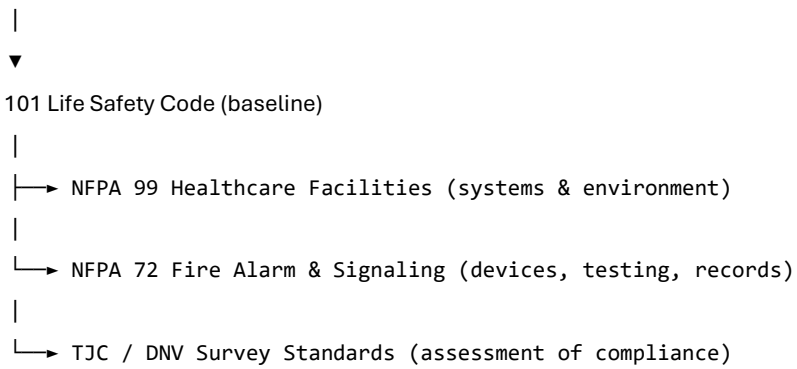
LAYER 3: STATE & LOCAL AUTHORITIES HAVING JURISDICTION (AHJ)

State health departments and local fire marshals enforce state-adopted codes. Many states have adopted NFPA 99, NFPA 72, and NFPA 101 with local amendments. The AHJ's interpretation prevails at the local level.

LAYER 4: NFPA STANDARDS (Referenced by all layers above) NFPA 99: Health Care Facilities Code NFPA 72: National Fire Alarm and Signaling Code NFPA 101: Life Safety Code

HOW THE STANDARDS CONNECT:

CMS Conditions of Participation



THE KEY STANDARDS, AT A GLANCE

NFPA 99: Health Care Facilities Code The primary standard for healthcare occupancy fire and life safety. Establishes a risk-based category framework (Categories 1–4) and sets requirements for electrical systems, medical gas, fire protection, and HVAC in each category. Most recent edition: 2021.

NFPA 72: National Fire Alarm and Signaling Code Governs the design, installation, inspection, testing, and maintenance of fire alarm systems. Healthcare-specific provisions cover smoke detection in patient areas, Emergency Voice/Alarm Communication (EVAC) systems, notification appliance audibility and visibility, and mass notification. Most recent edition: 2022.

NFPA 101: Life Safety Code Governs means of egress, compartmentalization, construction type, and occupancy-specific requirements. CMS adopts the 2012 edition with modifications, verify the edition your state has adopted.

THE JOINT COMMISSION: EC and LS Standards TJC's Environment of Care (EC) and Life Safety (LS) chapters align directly to NFPA requirements. Surveyors assess compliance through documentation review, physical inspection, and staff interviews.

DNV HEALTHCARE: NIAHO Standards DNV uses its National Integrated Accreditation for Healthcare Organizations standards, which reference NFPA and ISO 9001. DNV's annual survey model means deficiencies are identified and corrected more frequently than in a triennial TJC cycle, a significant operational advantage for well-run facilities.

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NOTE ON EDITION ADOPTION:

Code edition adoption varies significantly by state and by accreditation body. Always verify which edition of each standard your AHJ has adopted before design, specification, or compliance assessment work begins.

SECTION 3

NFPA 99 DECODED (WHAT IT REQUIRES IN PRACTICE)

NFPA 99 uses a risk-based approach to categorize healthcare spaces and assign requirements based on the consequences of system failure to patients.

THE FOUR CATEGORIES

CATEGORY 1: Highest Risk Spaces where failure of equipment or a utility system is likely to cause major injury or death of patients or caregivers. Examples: Operating rooms, ICUs, cardiac catheterization labs, emergency departments, labor & delivery, NICUs.

Requirements include:

- Two independent sources of power (Essential Electrical System)
- Smoke detection per NFPA 72 in patient sleeping and care areas
- Automatic sprinkler systems throughout
- Emergency power restored within 10 seconds of loss of normal power
- Medical gas and vacuum systems with specific alarm requirements

CATEGORY 2: Moderate Risk Spaces where failure is likely to cause minor injury to patients or caregivers. Examples: General patient care areas, radiology, physical therapy.

CATEGORY 3: Low Risk Spaces where failure is unlikely to cause injury but may cause patient discomfort. Examples: Administrative offices, waiting areas.

CATEGORY 4: Minimal Risk Spaces with no patients or life-critical equipment.

ESSENTIAL ELECTRICAL SYSTEM (EES): KEY REQUIREMENTS

For Category 1 and Category 2 spaces, NFPA 99 requires a three-branch Essential Electrical System:

LIFE SAFETY BRANCH (LSB):

Powers fire alarms, exit signs, emergency lighting, and fire pumps. Must be restored within 10 seconds of power loss. This branch directly governs fire alarm panel power supply design.

CRITICAL BRANCH:

Powers patient care-related equipment, nurse call systems, and selected task lighting in patient care areas.

EQUIPMENT BRANCH:

Powers large, fixed equipment and HVAC serving operating rooms.

FIRE ALARM SYSTEM INTERFACES REQUIRED BY NFPA 99

The fire alarm system must integrate with multiple NFPA 99-governed systems:

1. SMOKE CONTROL:

Fire alarm activation initiates HVAC shutdown and smoke damper activation in smoke compartment configurations per NFPA 101.

2. MEDICAL GAS SYSTEMS:

Fire alarm systems must interface with medical gas master alarm panels. Specific detection events may trigger gas shutoff sequences.

3. ELEVATOR RECALL:

Fire alarm activation triggers Phase I elevator recall per ASME A17.1.

4. DOOR HOLDER RELEASE:

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Magnetic door holders on fire and smoke barrier doors must release upon alarm activation.

5. EMERGENCY POWER:

Fire alarm control panels and notification systems must be connected to the Life Safety Branch of the EES, ensuring continuous operation during any power failure event.

DOCUMENTATION REQUIREMENTS UNDER NFPA 99

Facilities must maintain:

- Risk assessments for each space category assignment
- Records of all testing and inspection of governed systems
- Equipment maintenance logs with qualified technician credentials
- Evidence that maintenance is performed by qualified personnel
- Policies and procedures for emergency response

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SECTION 4

NFPA 72 IN HEALTHCARE: FIRE ALARM SYSTEM REQUIREMENTS

NFPA 72 governs every element of the fire alarm system, from the control panel to the detector on the ceiling to the evacuation tone in the corridor.

In healthcare settings, the stakes are uniquely high: many patients cannot self-evacuate, staff must initiate defend-in-place protocols, and false alarms have direct clinical consequences including disruption to procedures and patient care.

SYSTEM DESIGN: HEALTHCARE-SPECIFIC REQUIREMENTS

INITIATING DEVICES:

- Smoke detectors are required in all patient sleeping areas, including corridors and rooms
- Heat detectors permitted in kitchens, mechanical rooms, and areas where smoke detectors would produce excessive false alarms
- Manual pull stations required at all exits and stairwell entries
- Duct smoke detectors required on air handling units serving patient areas, must interface with HVAC shutdown per NFPA 90A
- Waterflow switches on sprinkler systems connected to the FACP

EMERGENCY VOICE/ALARM COMMUNICATION (EVAC) SYSTEMS:

Healthcare facilities above specified thresholds require a dedicated EVAC system providing:

- Intelligible voice instructions throughout the facility
- Ability for staff to deliver live announcements from the fire command center
- Pre-recorded evacuation and defend-in-place messages
- Zoned speaker coverage allowing floor-by-floor and wing-by-wing messaging
- Audibility levels accounting for healthcare ambient noise levels (minimum 75 dB at pillow level in sleeping areas, 15 dB above ambient in other areas)

NOTIFICATION APPLIANCES:

- Audible devices: minimum 75 dB at pillow level in sleeping areas
- Visible appliances (strobes): required in all public areas and where audible coverage cannot be met
- Strobes must be synchronized where multiple devices are visible simultaneously from any point in the space

FIRE ALARM CONTROL PANEL (FACP):

- Must be listed for the intended application (UL 864)
- Primary and secondary (battery) power required
- Must be connected to the Life Safety Branch of the EES
- Remote annunciators required at the fire command center and other designated locations per the design
- System must be monitored by a UL-listed central station

INSPECTION, TESTING & MAINTENANCE (ITM): NFPA 72 CHAPTER 14

This is where the majority of healthcare fire alarm survey findings originate. NFPA 72 establishes mandatory test frequencies for every system component.

TESTING FREQUENCY SUMMARY:

Weekly:

- Visual inspection of control panel indicator status
- Confirm central station monitoring is active

Monthly:

- Test one manual pull station per zone (rotated to cover all annually)
- Test supervisory signals

Quarterly:

- Test all duct detectors and HVAC interface functions

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- Test all elevator recall functions
- Test magnetic door holder release on all connected doors

Semi-Annual:

- Test 50% of smoke detectors (complete remaining 50% in second cycle)

Annual:

- Test ALL initiating devices (detectors, pull stations, waterflow)
- Test ALL notification appliances (audible and visible)
- Test EVAC system intelligibility and zone coverage
- Test all system interfaces (HVAC, elevator, doors, medical gas)
- Functional test of the complete system
- Battery load test (4-hour discharge)
- Verify central station signal reception for all alarm types

Every 5 Years:

- Sensitivity testing of all smoke detectors
- Full system wiring continuity and ground fault testing
- Battery replacement if sealed lead-acid type

DOCUMENTATION: WHAT SURVEYORS REQUEST

TJC and DNV surveyors will request ITM records at every survey. Documentation deficiencies are treated with the same seriousness as physical system deficiencies.

Required documentation includes:

- Test records for every device, every test cycle
- Technician name, credentials, and license numbers
- Date and results for every test performed
- List of any devices that failed and corrective action taken
- Sign-off by a qualified inspector (NICET Level II or equivalent)
- As-built drawings, current, accurate, and accessible
- Impairment records for any system out-of-service period
- Fire watch logs for any period the system was impaired or offline

MASS NOTIFICATION IN HEALTHCARE: NFPA 72 CHAPTER 24

Mass notification systems are increasingly relevant in healthcare for:

- Active threat and lockdown notifications
- Severe weather alerts
- Internal emergency codes (Code Red, Code Blue, Code Silver, etc.)
- Communication across multi-building campuses

When a mass notification system coexists with a fire alarm system, NFPA 72 requires clear protocols for system priority and operator override. Fire alarm signals must not be suppressed by MNS activity without specific engineering safeguards in place.

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SECTION 5

THE JOINT COMMISSION LIFE SAFETY STANDARDS: FIELD GUIDE

TJC's Life Safety (LS) chapter is the primary chapter under which fire alarm and fire protection findings are cited. Understanding how TJC structures its survey assessment directly helps facilities prioritize their preparation.

KEY TJC LIFE SAFETY STANDARDS

LS.01.01.01: Life Safety Code Compliance The hospital must comply with the NFPA 101 Life Safety Code. Surveyors use the Statement of Conditions (SOC) and current Life Safety drawings to assess compliance. AHJ-approved Plans for Improvement (PFIs) for known variances must be documented and current.

LS.02.01.10: Interim Life Safety Measures (ILSMs) When construction, renovation, or system impairment reduces the level of life safety below code requirements, the hospital must implement and document ILSMs. Failure to trigger or document ILSMs during active projects is a frequent TJC finding.

LS.02.01.20: Statement of Conditions (SOC) Hospitals must complete and maintain a current SOC documenting the state of their life safety environment and all Plans for Improvement, including target completion dates and responsible parties.

LS.02.01.30: Building and Fire Protection Features Surveyors physically walk the facility to assess:

- Corridor clearance (minimum 8 ft clear in patient areas)
- Smoke barrier and fire barrier integrity (penetrations, door gaps)
- Fire and smoke door condition (latching, gaps, hardware, seals)
- Exit sign and emergency lighting condition

LS.02.01.35: Fire Alarm Systems Surveyors assess the fire alarm system against NFPA 72:

- ITM documentation for all required test cycles
- Device coverage and physical condition
- EVAC system intelligibility and coverage
- FACP status, no active trouble conditions
- Central station monitoring documentation current

LS.03.01.10: Fire Drills Hospitals must conduct fire drills on every shift, every quarter. Drill records must document:

- Date, time, and shift
- Location and area involved
- Observations and deficiencies noted
- Staff response quality assessment

KEY ENVIRONMENT OF CARE (EC) STANDARDS

EC.02.03.05: Fire Safety Equipment Testing Documents specific testing requirements for all fire protection equipment:

- Fire extinguisher inspections (monthly visual + annual maintenance)
- Kitchen suppression system inspections (semi-annual)
- Sprinkler system inspections per NFPA 25
- Fire alarm system inspections per NFPA 72

EC.02.05.07: Utility Systems Testing and Maintenance Addresses the Essential Electrical System, generator testing, and automatic transfer switch testing, all of which directly support fire alarm system reliability and Life Safety Branch integrity.

HOW SURVEYORS ASSESS FIRE ALARM COMPLIANCE

TJC Life Safety surveyors are typically contracted engineers with specialized fire and life safety expertise. Their on-site assessment includes:

DOCUMENTATION REVIEW:

- Most recent NFPA 72 ITM records (all required cycles)
- Central station monitoring records
- System impairment and fire watch logs
- Fire drill records (all shifts, all quarters, trailing 12 months)
- Current Life Safety drawings at FACP location

PHYSICAL WALKTHROUGH:

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- Inspect FACP for any active trouble conditions
- Inspect a random sample of devices for condition and placement
- Activate selected devices during the survey
- Inspect smoke compartment barriers and door hardware

STAFF INTERVIEWS:

- Ask staff about evacuation procedures (RACE protocol)
- Verify staff can locate manual pull stations in their area
- Confirm Life Safety Officer knows the ITM schedule and current status

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SECTION 6

THE 12 MOST COMMON FIRE & LIFE SAFETY SURVEY FINDINGS

These are the fire and life safety deficiencies most frequently cited in TJC and CMS surveys. Every one of them is correctable with the right systems and processes in place before the survey window opens.

FINDING 1: INCOMPLETE OR MISSING ITM DOCUMENTATION

The single most common fire alarm finding. Surveyors request NFPA 72 ITM records and find missing test cycles, gaps in device coverage documentation, or records without required technician credentials.

FIX:

- Implement a documented ITM schedule aligned to NFPA 72 Chapter 14
- Use a digital inspection platform with automated scheduling and reminders
- Verify technician NICET credentials before any testing engagement
- Retain all records for a minimum of 3 years (TJC requirement)

FINDING 2: SMOKE DETECTOR SENSITIVITY OUT OF RANGE

Detectors that are too sensitive (nuisance alarms) or insufficiently sensitive (delayed detection) are an NFPA 72 violation. Sensitivity must be tested at installation and every 5 years thereafter.

FIX:

- Track detector installation dates and plan 5-year sensitivity cycles
- Use a FACP with built-in detector drift compensation capability
- Proactively replace detectors exceeding 10 years of service life

FINDING 3: FIRE DRILL NON-COMPLIANCE

Missing drill records, drills not conducted on all shifts, or staff unable to demonstrate evacuation procedures. TJC requires drills quarterly on every shift, this is among the most commonly missed requirements in multi-shift healthcare environments.

FIX:

- Build a drill schedule matrix covering all shifts and all quarters
- Assign drill accountability by department and shift supervisor
- Document observations rigorously, surveyors look for genuine assessment, not rubber-stamp completion records

FINDING 4: CORRIDOR OBSTRUCTIONS

Items stored in egress corridors, (medical equipment, furniture, supply carts) that reduce corridor width below code minimums. Frequently cited, easily corrected, yet chronically recurring across healthcare settings.

FIX:

- Establish a written storage policy defining permissible corridor items
- Conduct monthly corridor compliance walks by department supervisors
- Engage department managers on personal accountability for their areas

FINDING 5: SMOKE BARRIER AND FIRE DOOR DEFICIENCIES

Penetrations in smoke or fire barriers, doors that fail to latch, or doors with damaged seals, hardware, or closing mechanisms. Often a capital-intensive finding to fully remediate.

FIX:

- Conduct a systematic smoke and fire barrier assessment across all floors
- Seal all penetrations with UL-listed through-penetration firestop systems
- Inspect and test all fire and smoke doors annually for latching and gap
- Develop a door repair and replacement capital plan

FINDING 6: ACTIVE TROUBLE CONDITIONS ON THE FACP

Surveyors observe trouble conditions illuminated on the fire alarm panel, indicating device faults, communication failures, or system issues that have not been investigated or resolved.

FIX:

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- Assign daily FACP inspection to a named, accountable staff member
- Establish a clear escalation process for all trouble conditions
- Target resolution within 24 hours, do not allow open troubles to persist

FINDING 7: MISSING OR OUTDATED LIFE SAFETY DRAWINGS

Life Safety drawings must accurately reflect the current building state, smoke compartments, fire barriers, exit routes, and device locations. Outdated drawings following renovations are a consistent finding.

FIX:

- Update Life Safety drawings within 30 days of any renovation completion
- Maintain drawings in digital format with formal version control
- Post current drawings at the fire alarm control panel location

FINDING 8: ILSM NON-COMPLIANCE DURING CONSTRUCTION

When construction activities compromise fire protection systems or egress paths, hospitals must implement and document Interim Life Safety Measures. Many facilities fail to trigger the ILSM process appropriately.

FIX:

- Include ILSM assessment as a mandatory step in project approval workflow
- Assign ILSM accountability to the Life Safety Officer for every project
- Document ILSM implementation, scope, and duration formally in the SOC

FINDING 9: SPRINKLER SYSTEM ITM DEFICIENCIES

Common deficiencies include missing quarterly waterflow tests, inspector's test valve not tested, or sprinkler heads with paint, corrosion, or physical damage. Governed by NFPA 25.

FIX:

- Contract an NFPA 25-qualified inspection firm for all sprinkler ITM
- Maintain sprinkler records parallel to and alongside fire alarm ITM
- Walk the sprinkler system annually to identify damaged or obstructed heads

FINDING 10: EVAC SYSTEM INTELLIGIBILITY FAILURES

Emergency Voice/Alarm Communication systems that fail to deliver intelligible voice messages throughout the facility. Often identified during testing or during the survey in high-noise clinical areas.

FIX:

- Commission an STI (Speech Transmission Index) test of all EVAC coverage
- Upgrade speakers in high-noise areas (EDs, kitchens, mechanical spaces)
- Test all pre-recorded messages for content accuracy and audio clarity

FINDING 11: FIRE EXTINGUISHER INSPECTION LAPSES

Monthly visual inspections and annual maintenance are required. Missing inspection tags or unsigned records are common low-hanging deficiencies that surveyors consistently catch.

FIX:

- Assign monthly extinguisher inspection responsibility by area/department
- Use a simple inspection tag and log system, retain records on file
- Contract annual maintenance through a certified fire equipment provider

FINDING 12: STAFF CANNOT DEMONSTRATE FIRE RESPONSE PROCEDURES

Surveyors ask frontline staff about RACE (Rescue, Alarm, Contain, Evacuate/Extinguish) and PASS (Pull, Aim, Squeeze, Sweep) procedures. Staff who cannot respond accurately is a finding against the facility.

FIX:

- Integrate RACE and PASS training into annual mandatory competencies
- Include fire response scenarios in new employee orientation
- Post clear visual reminders at nursing stations and care areas

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SECTION 7

PRE-SURVEY READINESS CHECKLIST

Use this checklist in the 90–180 days prior to your anticipated survey window. Every item maps to a TJC standard and/or NFPA requirement.

FIRE ALARM SYSTEM (NFPA 72 / TJC LS.02.01.35)

☐ ITM records available and complete for the trailing 3 years
☐ All required annual, semi-annual, quarterly, and monthly tests complete
☐ No open trouble conditions on the FACP
☐ No devices listed as failed or deferred without a remediation plan
☐ Central station monitoring contract current (confirmation on file)
☐ 5-year smoke detector sensitivity tests scheduled and logged
☐ Battery 4-hour load test completed within required cycle
☐ EVAC system intelligibility tested (documented STI score)
☐ FACP as-built drawings current, accurate, and posted at panel location
☐ Technician NICET credentials on file for all testing personnel
☐ Impairment records complete with fire watch logs where applicable

FIRE DRILLS (TJC LS.03.01.10)

☐ Four drills conducted per shift in the trailing 12 months
☐ All drill records include date, time, shift, area, and observations
☐ Staff deficiencies documented and addressed post-drill
☐ Drill schedule matrix prepared for the next 12 months

SPRINKLER SYSTEM (NFPA 25 / TJC EC.02.03.05)

☐ Quarterly waterflow and tamper switch tests completed
☐ Annual inspection of all heads and trim complete
☐ No painted, corroded, or damaged sprinkler heads observed
☐ 5-year internal inspection schedule tracked

SMOKE BARRIERS AND FIRE DOORS (TJC LS.02.01.30)

☐ All smoke barrier penetrations sealed with approved firestop systems
☐ Fire door inspection complete (all doors latch positively)
☐ Fire door gap measurements within code requirements
☐ Smoke door assemblies tested for self-closing and positive latching

EGRESS AND CORRIDORS

☐ No corridor obstructions (minimum width maintained throughout)
☐ Exit signs illuminated and tested per required schedule
☐ Emergency lighting tested and documented
☐ All egress routes clearly marked and unobstructed

LIFE SAFETY DOCUMENTATION

☐ Statement of Conditions (SOC) current
☐ All Plans for Improvement (PFIs) documented with target dates
☐ Life Safety drawings current (updated for all recent renovations)
☐ ILSM records complete for any active or recent construction projects

STAFF READINESS

☐ Annual fire safety training completed for all clinical staff
☐ RACE and PASS procedures posted in all patient care areas
☐ Staff can demonstrate fire response procedures verbally on request
☐ Department managers know location of pull stations and fire panels

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SECTION 8

SELECTING A CODE-COMPLIANT FIRE ALARM SYSTEM FOR HEALTHCARE

When a hospital is planning a new facility, major renovation, or system replacement, the fire alarm system specification is among the most consequential decisions the facility team and consulting engineer will make. Meeting NFPA 72 requirements is the floor, not the ceiling, for healthcare applications.

THE SPECIFICATION CRITERIA THAT MATTER

1. UL LISTING: NON-NEGOTIABLE

The FACP, all initiating devices, and all notification appliances must be UL listed for their intended application. Confirm UL 864 listing for the FACP and UL 268 for smoke detectors. AHJ plan review will verify.

2. HEALTHCARE-GRADE EVAC CAPABILITY

The system must support a multi-zone, staff-operated EVAC platform:

- Pre-recorded messages for fire evacuation, defend-in-place, and all facility emergency codes
- Live voice override capability from the fire command center
- Selective zone messaging by floor, wing, and building
- Intelligibility documentation to meet STI requirements

3. SCALABILITY AND SYSTEM INTEGRATION

Hospital campuses are rarely static. The specified system must:

- Support expansion without full panel replacement
- Integrate with the Building Management System for HVAC control
- Interface with nurse call, access control, and elevator systems
- Support multi-building networking on a single integrated platform

4. FULLY ADDRESSABLE DEVICE ARCHITECTURE

Every device must have a unique address reporting independently to the FACP. This is essential for:

- Rapid fault isolation and pinpoint troubleshooting
- NFPA 72 documentation at the individual device level
- Alarm verification at the device to reduce false alarm impact

5. REDUNDANCY AND SURVIVABILITY

Patient care cannot stop for a fire alarm system failure:

- Class A / Style 7 wiring for critical signal paths
- Standby power for 24-hour standby plus 5-minute full alarm load
- Distributed intelligence maintaining local operation if network

communication between nodes is interrupted

6. INSPECTION AND TESTING SUPPORT

A system that supports efficient ITM reduces annual compliance costs and the risk of documentation deficiencies:

- Automated test scheduling and record generation
- Digital records exportable in NFPA 72-compliant format
- Panel-level diagnostics identifying troubled devices between test cycles
- Remote monitoring integration for central station connectivity

7. LONG-TERM MANUFACTURER SUPPORT

Healthcare systems operate for 15–25 years. The manufacturer must demonstrate:

- Parts availability and service life commitments beyond 10 years
- Firmware and software update pathways for current installations
- Technical support resources that are North American-based
- An installer and service network in the facility's geography

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QUESTIONS TO ASK YOUR FIRE ALARM MANUFACTURER

- Is your FACP UL 864 listed for healthcare occupancy?
- Can the system support addressable devices across multiple buildings

on a single integrated network?

- Does the EVAC platform support live voice override and selective zoning?
- What is the maximum standby power duration on battery backup?
- Can the system generate NFPA 72-compliant ITM records automatically?
- How does the system integrate with our BMS and nurse call system?
- What is your parts availability commitment beyond 15 years?
- Where is your technical support team located?
- Can you provide references from comparable healthcare facilities?

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SECTION 9

HOW MIRCOM SUPPORTS HEALTHCARE COMPLIANCE

Mircom Group of Companies has designed and manufactured fire alarm and life safety systems for healthcare facilities across North America for decades. Our systems are engineered to the specific operational demands of hospitals and healthcare campuses, not adapted from commercial product lines.

WHAT WE OFFER HEALTHCARE FACILITIES

HEALTHCARE-CERTIFIED FIRE ALARM CONTROL PANELS:

Mircom's FleX-Net and FX-2000 Series panels are UL 864 listed and designed for large, complex, multi-building healthcare campus applications. Fully addressable, networkable, and scalable to thousands of devices across a single integrated system.

EMERGENCY VOICE/ALARM COMMUNICATION:

Mircom's EVAC platforms deliver multi-zone, intelligible voice communication with full staff override capability, meeting NFPA 72 Chapter 24 requirements and TJC surveyor expectations for healthcare voice evacuation.

INTEGRATED MASS NOTIFICATION:

For facilities requiring simultaneous fire alarm and mass notification capability, Mircom's integrated MNS solutions manage system priority and operator control in full compliance with NFPA 72 Chapter 24.

COMPLIANCE DOCUMENTATION SUPPORT:

Mircom systems generate device-level reports and testing records that directly support NFPA 72 ITM documentation requirements, reducing the administrative burden on Life Safety Officers and their ITM contractors.

TECHNICAL SUPPORT:

Mircom's engineering and technical support teams support consulting engineers through design, submittal review, commissioning, and troubleshooting post-installation. All support is North American based.

SPECIFICATION SUPPORT FOR CONSULTING ENGINEERS:

Mircom's applications engineering team works directly with specifying engineers to develop project-specific specifications, submittal packages, and coordination drawings for healthcare projects of any scale.

A NOTE ON OUR APPROACH

This playbook was built to help healthcare facilities and their engineering partners navigate a complex compliance landscape, not to close a sale. If your facility's current system meets your compliance requirements and your survey record is clean, that is a good outcome and we respect it.

If your system is aging, your ITM documentation has gaps, your last survey produced Life Safety findings, or you are planning a renovation or new facility, we welcome the conversation.

HOW TO CONNECT

Technical enquiries and specification support: engineering@mircom.com

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APPENDIX A: CODE EDITIONS & ADOPTION QUICK REFERENCE

VERIFY WITH YOUR AHJ: STATE ADOPTION VARIES SIGNIFICANTLY

NFPA 99 Health Care Facilities Code Most recent edition: 2021

CMS adoption: 2012 edition (with modifications, per 2016 final rule)

NFPA 72 National Fire Alarm and Signaling Code Most recent edition: 2022 Adoption: Varies by state, confirm with AHJ before design

NFPA 101 Life Safety Code Most recent edition: 2021

CMS adoption: 2012 edition

TJC reference: 2012 edition (aligned with CMS)

NFPA 25 Standard for Inspection, Testing

Maintenance of Water-Based Fire Protection Systems Most recent edition: 2023 Adoption: Varies by state

NOTE: Code edition conflicts between federal, state, and accreditation body requirements are common. Always seek AHJ clarification before finalizing any design, specification, or compliance decision.

APPENDIX B: GLOSSARY

AHJ Authority Having Jurisdiction: the body responsible for enforcing code requirements in each location

CMS Centers for Medicare & Medicaid Services: sets federal Conditions of Participation for hospital reimbursement

CoP Conditions of Participation: CMS requirements for Medicare/Medicaid reimbursement eligibility

DNV Det Norske Veritas: accreditation body holding CMS deemed status

EES Essential Electrical System: the three-branch backup power system required by NFPA 99 in healthcare facilities

EVAC Emergency Voice/Alarm Communication system

FACP Fire Alarm Control Panel

ILSM Interim Life Safety Measure: compensating action during periods of reduced life safety protection

ITM Inspection, Testing, and Maintenance

LSB Life Safety Branch: the EES branch powering fire alarms, exit signs, and emergency lighting

MNS Mass Notification System

NICET National Institute for Certification in Engineering Technologies: credential body for fire alarm technicians

NICU Neonatal Intensive Care Unit

NFPA National Fire Protection Association

PFI Plan for Improvement: documented TJC variance with target date

RACE Rescue, Alarm, Contain, Evacuate/Extinguish: staff fire response procedure

SOC Statement of Conditions: TJC self-assessment documentation tool

STI Speech Transmission Index: standardized intelligibility metric

TJC The Joint Commission: primary US hospital accreditation body

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