



# 2018 NICET Code Transition Changes

NICET will be transitioning to newer codes accepted in their exams in “mid-October 2018”, specifically:

- NFPA 72 – 2016
- NFPA 70 – 2014
- IBC – 2015
- NFPA 101 – 2015

Here are some changes you will see between the previously accepted codes and the new codes:

## NFPA 72 - 2016 - Major Changes from 2013

NEW - 10.5.4 – Plans Examiners and Inspectors

- Must be qualified to perform review and/or inspection
- Documentation of qualifications by
  - o Registration, licensing, or certification by local AHJ
  - o Meet requirements of NFPA 1031 (Qualifications for Fire Inspector and Plans Examiner)
  - o Assigned by AHJ

NEW - 10.11.3 – Strobes shall not be activated when speakers used for non-emergency paging

NEW – 12.3.6 – Class N pathway (Network)

- Two or more pathways over network, must be physically separate cables
- Loss of signal or lack of operation indicates trouble
- Individual open, ground, or short cannot affect other pathways

NEW – 14.2.2.4 – Notify owner in writing if recalled equipment found during inspection or testing

NEW - 18.4.2.3.2 – MNS may interrupt minimum repetition of alert and evac signals

CHANGE - 18.5.3.2 – Minimum light pulse duration reduced to 20 milliseconds (from 200)

Exception: Durations up to 100 milliseconds permitted for certain applications

NEW – 21.8.3 – Exception – Class D circuits permitted with door and shutter release

CHANGE – 23.6.1 – Single fault on SLC shall not cause loss of more than one zone (from 50 devices)

NEW – A.23.6.1

- Applies to both shorts and opens
- A single zone could be designated in following ways:
  - o By floor, when SLC does not span multiple floors
  - o By floor area, where floor split into multiple zones based on size (e.g., 22,500 sf)
  - o By fire or smoke barrier boundaries which an SLC would not cross
  - o By maximum length or circuit, where SLC would not be longer than set length (e.g., 300 ft)

NEW – 23.6.2 – Class N Devices

- No area or zone shall be served by single device using Class N, where single device failure would affect initiating or output signals
- Where device reference above is served by single pathway, it shall terminate the pathway with no ability to connect additional endpoint devices
- A single fault on Class N connected to connected to addressable devices shall not cause the loss of more than one addressable device

NEW - 23.6.3 – Class N Shared Pathways

- Class N shared pathways must be Level 3 shared pathways
- Level 1 and 2 shared pathways require documentation and approval
- Class N pathways shall not be accessible to public
- Shared pathways required a deployment plan
- Configuration upgrades and updates require a change control plan
- A management organization shall be established to manage the life safety network
- An analysis shall be performed to determine and document communications capability
- A maintenance plan shall be developed to monitor, maintain, test, and control changes

NEW – 23.8.2.9 – Multiple Interconnected FACU

- Must be reset from one location
- Reset procedure must be documented and posted by each control unit and annunciator
- Remote resetting and silence from other than protected premise requires AHJ approval

NEW – 24.3.1.2 – where no listed speaker exists to achieve intelligibility, a nonlisted speaker may be used

24.3.13.4.1 – Relocation or partial evacuation requires Level 2 or 3 survivability (no change)

- NEW - Exception 1 – Level 1 permitted where notification zones separated by less than 2-hour firewall
- NEW - Exception 2 – Level 1 permitted where there are at least two pathways separated by at least one-third the maximum diagonal of the notification zones that the pathway is passing through and the pathway is Class X or N

NEW – 24.5.14 – Local Operating Console (LOC) mounting requirements

- LOC shall be at minimum 36" AFF and maximum 48" AFF when horizontal reach is less than 10"
- If horizontal reach is 10" to 24", minimum elevation is 28" and maximum is 42"
- Text and visual indicators shall be visible from all elevations between 40" and 60"

#### 24.10 – Area of Refuge Systems

- CHANGE – 24.10.3 - Remote stations to central control point pathways shall be Class A, B, N, X

#### NEW – 24.12 – Stairway Communications Systems

- Remote point communicates to central control point
- If central control point is not constantly attended remote communication is required
- Remote points shall provide audible and visible indication of communication
- Remote points require instructions and location information both written and braille

CHANGE – 26.2.1.3 – Alarm Signal Disposition – specific zone or point must retransmitted to comm center

CHANGE – A. 26.2.2.1 – Alarm preverification removed, alarm signal verification time clarified to 90 seconds

NEW – 29.7.6.8 – Remote access data exchange shall not compromise integrity of fire alarm

NEW - 29.7.6.9 – Remote reset and silence shall be inhibited for 4 minutes from activation of fire alarm

NEW – 29-7.9.1.3.2 – Transmission means other than DACT require 24-hour secondary power

## **IBC – 2015 – Major Changes from 2012**

#### CHANGE – 907.2.3 - Group E

- Exception #1 – Manual fire alarm system not required with occupant load of 50 or less
- Exception #2 – Voice evac not required in occupants load of 100 or less when manual fire alarm activates approved occupant notification

#### CHANGE – 907.2.6.1 – Group I-1

- Group I-1 Condition 1 – Smokes not required in habitable spaces with sprinkler system (other than sleeping units and kitchen)

#### NEW – 907.2.11 – Smoke Alarms in Groups R-2, R-3, R-4, and I-1

- Smoke alarms shall not be installed in following locations unless it prevents a smoke alarm from being installed in a sleeping area:
  - o Ionization smoke alarms less than 20' horizontally from permanent cooking appliance
  - o Ionization smoke alarms with silence switch less than 10' from permanent cooking appliance
  - o Photoelectric smoke alarms less than 6' from permanent cooking appliance
- Smoke alarms shall not be installed less than 3' horizontally from bathroom with tub or shower, unless it prevents a smoke alarm from being installed in a sleeping area
  - o Smoke detectors provided as part of building fire alarm shall be an acceptable alternative to smoke alarms when they comply with the following:
    - o Fire alarm system complies with Section 907
    - o Activation of smoke detector in dwelling or sleeping unit initiates alarm notification in unit
    - o Activation of smoke in dwelling or sleeping unit does not initiate notification outside unit

#### NEW – 907.2.22 – Airport Control Towers

- Airport control towers with multiple exits and sprinkler system shall have smokes at:
  - o Airport traffic control cab
  - o Electrical and mechanical equipment rooms
  - o Airport terminal radar and electronics rooms
  - o Outside each opening into exterior exit stairway
  - o Along the single means of egress permitted from observation levels
  - o Outside openings into single means of egress permitted from observation levels
- Airport control towers with a single exit or without sprinklers shall have smokes at:
  - o Airport traffic control cab
  - o Electrical and mechanical equipment rooms
  - o Airport terminal radar and electronics rooms
  - o Office spaces incidental to tower operation
  - o Lounges for employees, including sanitary facilities
  - o Means of egress
  - o Accessible utility shafts

#### NEW – 907.5.2.1 – Audible Alarms

- Audible notification is not required in critical care areas of Group I-2 Condition 2 using private mode
- Visible notification at nurses control station or other continuously occupied locations in Group I-2 Condition 2 are an acceptable alternative to audible notification throughout the suite

#### NEW - 907.5.2.3 – Visible notification not required in critical care areas of Group I-2 Condition 2

#### NEW - 907.6 – Installation

- Fire Alarm shall identify specific initiating device, location, device type (addressable)
- Exceptions:
  - o Single story building less than 22,500 s.f.
  - o System with only pull station and waterflow and not more than 10 additional initiating devices
  - o Special initiating devices that do not support individual device identification
  - o Systems or devices replacing existing system
- Initiating devices shall be annunciated at approved on-site location

## **NFPA 101 – 2015 – Major Changes from 2012**

### **NEW - 9.6.2.10 – Smoke Alarms**

- Smoke alarms and smoke detectors shall not be installed within 10' radius along horizontal flow path from stationary or fixed cooking appliance
- Smoke alarms or smoke detectors installed between 10' and 20' radius along horizontal flow path of stationary or fixed cooking appliance shall be equipped with alarm silencing and be photoelectric
- Exception – Photoelectric shall be permitted greater than 6' from cooking appliance when following:
  - o Kitchen or cooking area and adjacent spaces have no clear interior partitions
  - o The 10' area of exclusion would prohibit placement of smoke detector or smoke alarm required by another section of NFPA 101 or NFPA 72
- Smoke alarm and smoke detectors shall not be installed within a 36" horizontal path of a door to a bathroom containing a shower or tub unless listed for installation in close proximity

### **NEW – 14.3.4.4 – Carbon Monoxide (CO) Detection in New Educational**

- CO alarms and detectors shall be provided in New Educational as follows:
  - o On ceiling of rooms with permanently installed fuel-burning appliances
  - o Centrally located in occupiable spaces served by first air supply register from permanently installed fuel-burning appliances
  - o Centrally located within occupiable spaces adjacent to communicating attached garage
- CO alarms and detectors are not required in the following locations:
  - o Garages
  - o Occupiable spaces with communicating attached garages that are open parking structures
  - o Occupiable spaces with communicating attached garages that are mechanical ventilated

## **NFPA 70 – 2014 - National Electrical Code**

No major changes in Chapter 3 or Article 760 since 2011 edition