NFPA 101®-2012, 2024 and Proposed 2027 Editions
Life Safety Code®
TIA Log No.: 1869
Reference: 2012 edition: 18.2.2.2.11(new), 19.2.2.2.11(new), 20.2.3.5(new), 21.2.3.5(new)
2024 edition: 18.2.2.2.13(new), 19.2.2.2.12(new), 20.2.2.2.14(new), 21.2.2.2.15(new)
2027 edition: 18.2.2.2.14(new), 19.2.2.2.14(new), 20.2.2.2.14(new), 21.2.2.2.15(new)
Comment Closing Date: March 5, 2026
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Wording for the 2012 edition:

1. Add new paragraph 18.2.2.2.11 to read as follows:

18.2.2.2.11 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 18.2.3.4(6), 18.2.3.5(5), 18.2.3.6, or 18.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 18.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

2. Add new paragraph 19.2.2.2.11 to read as follows:

19.2.2.2.11 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 19.2.3.6 and 19.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 19.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

3. Add new paragraph 20.2.3.5 to read as follows:

20.2.3.5 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 20.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 20.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

4. Add new paragraph 21.2.3.5 to read as follows:

21.2.3.5 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 21.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 21.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

Wording for the 2024 edition:

1. Add new paragraph 18.2.2.2.13 to read as follows:

18.2.2.2.13 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 18.2.3.4(6) through 18.2.3.4(8), 18.2.3.5(6), 18.2.3.6, or 18.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 18.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

2. Add new paragraph 19.2.2.2.12 to read as follows:

19.2.2.2.12 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 19.2.3.6 and 19.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 19.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

3. Add new paragraph 20.2.2.2.14 to read as follows:

20.2.2.2.14 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 20.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 20.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

4. Add new paragraph 21.2.2.2.15 to read as follows:

21.2.2.2.15 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 21.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 21.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

Wording for the Proposed 2027 edition:

1. Add new paragraph 18.2.2.2.14 to read as follows:

18.2.2.2.14 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 18.2.3.4(6) through 18.2.3.4(8), 18.2.3.5(6), 18.2.3.6, or 18.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 18.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

2. Add new paragraph 19.2.2.2.14 to read as follows:

19.2.2.2.14 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 19.2.3.6 and 19.2.3.7.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 19.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

3. Add new paragraph 20.2.2.2.14 to read as follows:

20.2.2.2.14 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 20.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 20.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

4. Add new paragraph 21.2.2.2.15 to read as follows:

21.2.2.2.15 Weapons detection systems shall be permitted within the required means of egress where all of the following requirements are met:

1) The weapons detection system shall provide a minimum clear width required for minimum door leaf width in 7.2.1.2.3 or as modified by 21.2.3.4.
2) Floor level at the weapons detection system opening shall meet the requirements of 7.2.1.3.
3) If the weapons detection system is portable, the written fire safety plan required by 21.7.2.2 shall address the possible relocation of the equipment during a fire or similar emergency.

Substantiation: Weapons detection systems are becoming increasingly common across various sectors, including health care. In fact, some states, such as California through Assembly Bill 2975, have begun mandating their installation at entry points of health care facilities.

While these systems enhance safety by identifying potential threats, improper installation can interfere with life safety provisions, particularly those related to building egress. However, when thoughtfully designed and installed, weapons detection systems can coexist with egress requirements, ensuring both security and safe evacuation. The means of egress consists of three components, Exit Access, Exit, Exit Discharge. Weapons detection systems are typically placed within the exit access, close to the exit. It is critical that these installations do not restrict the required exit capacity, which must be sufficient to accommodate the building's occupancy.

This proposal ensures that weapons detection systems do not impede exit access by referencing the minimum door leaf width requirements in 7.2.1.2.3 or as modified by the occupancy chapters. Generally, in new buildings, exit doorways must be at least 36 inches wide; in existing buildings, the minimum is 28 inches. Since these doorways represent the narrowest point in the egress path, requiring weapons detection systems to be no narrower than what is allowed for doors does not introduce additional risk. On the contrary, it enhances safety by reducing the risk of weapons entering the facility.

There is precedent for similar objects in the path of egress: turnstiles have long been permitted in buildings without negatively impacting egress. Turnstiles are allowed to have a clear width of just 16.5 inches and a maximum height of 39 inches. However, because they include physical barriers, those barriers must swing freely in emergencies. In contrast, weapons detection systems are open and unobstructed. While they often exceed the 39-inch height limit applicable to turnstiles, they typically require no more than 42 inches of clear opening to function effectively. Given that no single door is required to be more than 41-1/2 inches, these weapons detection systems do not present a bottleneck to egress.

It is also important to note that there is no requirement for hospital exit doors to accommodate bed movement; the minimum clear width remains 36 inches. Additional egress capacity is generally achieved through multiple 36-inch doors.

There have been several proposals and discussions regarding the mobility of weapons detection systems. Our intent is to make mobility optional due to evidence of challenges with both permanently mounted and mobile units. Permanently affixed items such as turnstiles or the

narrowed opening of a 36-inch exit door have proven acceptable in egress situations. In contrast, mobile units require relocation during an emergency, consuming valuable staff time that could otherwise be devoted to response efforts. Relocating these units also introduces additional security risks at a time when the facility may be most vulnerable. Furthermore, as demonstrated in the referenced video, mobile units themselves can become obstructions during evacuation. https://www.wkyc.com/article/news/local/cleveland/security-footage-scuffle-lobby-cleveland-metrohealth/95-31939d47-ce1d-4f09-8469-90a3abef2590

In summary, weapons detection systems can be safely integrated into health care facilities without compromising egress requirements, provided they meet the same dimensional standards as door openings.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process. The proposed TIA intends to correct a previously unknown existing hazard. The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation. The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.

The urgency of this request is driven by the fact that numerous healthcare Authorities Having Jurisdiction (AHJs) now require the installation of weapons detection systems in healthcare facilities. In response, many healthcare and ambulatory care occupancies are proactively implementing these systems to enhance safety for patients, staff, and visitors. However, some jurisdictions have raised concerns, citing these systems as obstructions within the path of egress. We believe these systems do not restrict egress any more than an exit door itself and are comparable to other permitted items in the egress path, such as turnstiles.

However, the widespread adoption of these technologies and the shift in security protocols was not fully recognized or anticipated during the drafting of the latest edition of NFPA 101. As a result, the current code is silent on this issue, leaving local jurisdictions to interpret and apply standards independently, often leading to inconsistent and potentially conflicting approaches.

Since CMS adopted the NFPA 101, 2012 edition, we are requesting that this edition be included in the proposed TIA. When the 2012 edition was developed, weapons detection systems were not a primary consideration for the committee. As a result this issue was overlooked and has remained unaddressed for more than a decade.

This TIA addresses an existing but previously unrecognized hazard: the growing threat of violence in health care facilities. Over the past decade, workplace violence in hospitals has surged dramatically. Health care workers are now five times more likely to experience violence than workers in other industries, and incidents have increased by more than 30% across all facility types between 2011 and 2022. In 2022 alone, nearly 17,000 hospital employees suffered violence-related injuries requiring time away from work. The financial impact is staggering U.S. hospitals incurred an estimated $18.27 billion in costs related to workplace violence in 2023, including prevention measures and post-incident recovery.

This proposed TIA aims to provide a public benefit by allowing the use of weapons detection systems, which would significantly reduce the recognized (known) hazard of assailants bringing weapons into hospitals to cause harm.

The advancement and widespread use of weapons detection systems have grown significantly and this TIA acknowledges their role as an important life safety enhancement.

While this option may be beneficial for other occupancies, the immediate need lies within healthcare. We have proposed this change specifically in the healthcare-related chapters because we do not want to make decisions on behalf of other occupancies, nor do we believe there is an emergency need for any of them to address this situation.

Based on this analysis, we believe this TIA satisfies four of the six criteria for emergency nature.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number, state whether you SUPPORT or OPPOSE the TIA along with your comment, and forward to the Secretary, Standards Council. SUBMIT A COMMENT