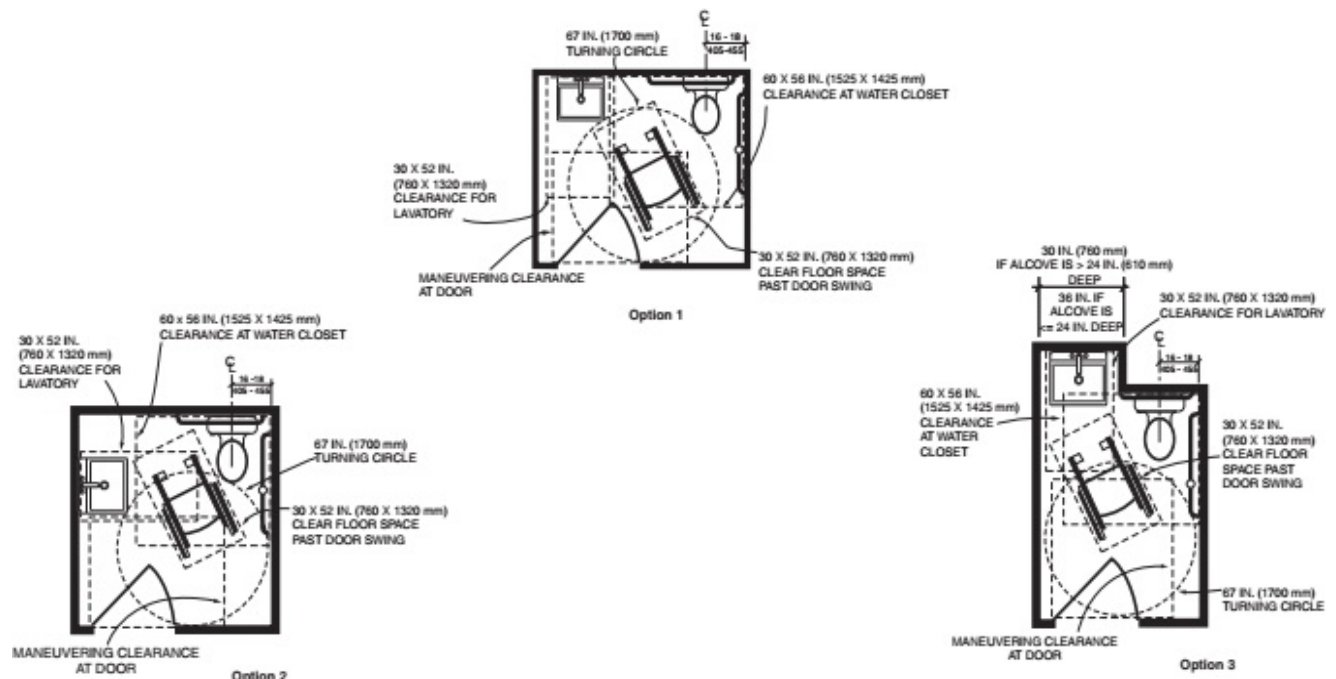




The ICC A117.1-2017 standard provides the technical requirements to make sites, facilities, buildings and elements accessible to and usable by people with physical disabilities. The intent of the standard is to allow a person with a physical disability to independently get to, enter, and use a site, facility, building, or element. For new buildings and additions, enhanced dimensions for the clear floor space, turning space and the accessible route. This will affect the space provided at elements and will increase the maneuverability within such spaces for users of powered wheelchairs and scooters.

Key changes in the 2017 ICC A117.1

- Provisions incorporating many of the latest criteria for public rights of way provisions for curb cuts, blended transitions, detectable warnings, diagonal parking and street parking (PROWAG).
- Provision to improve safety for an accessible route traversing a parking lot.
- Provisions to facilitate charging of powered wheelchairs where they will be parked for duration, such as in accessible hotel rooms and at some wheelchair seating in assembly spaces.
- Provisions addressing accessibility at electric vehicle charging stations.
- Provisions for water bottle filling stations.
- Provisions that address spaces for sign language interpreter stations and sign language video booths.
- A new section addressing classroom acoustics that aims to improve acoustics in the rooms and to reduce the intrusion of noises from outside the classroom, thereby enhancing the learning environment.
- New Toilet room clearances.



Key changes in the 2021 IEBC:

- For storm shelters, the required occupant capacity is now limited to the total occupant load of the classrooms, vocational rooms and offices in the school while the maximum distance of travel was deleted.
- When significant portions of a building's exterior wall coverings or exterior wall envelope are added or replaced, they must comply with the requirements of Chapters 14 and 26 of the IBC.
- Snow loads must be addressed during repair of substantial structural damage regardless of whether the damage was a result of snow.
- Additions, Level 3 alterations and Changes of occupancy in Educational occupancies are now required to meet the enhanced classroom acoustic requirements of Section 808 of ICC A117.1.
- Additional equipment may be added to a roof without a full structural analysis when the equipment weighs less than 400 pounds and is less than 10 percent of the total roof dead load.
- With a change of occupancy, a seismic analysis is required for a Group S or Group U occupancy changing to a new occupancy.
- Furniture, such as office cubicles, reception desks or smaller bookcases, are exempt from a permit and not intended to be a Level 2 alteration.
- Sprinkler requirements for Level 2 and Level 3 alterations are revised for higher hazard areas.

Key changes in NFPA 70 2020 NEC:

Four new articles include:

- Overvoltage Protection, Article 242;
- Medium Voltage Conductors and Cable, Article 311;
- Type P Cable, Article 337; and
- General Requirements for Communications Systems, new Article 800.
- GFCI protection,
- grounding conductors,
- lighting load calculations,
- surge protection and outdoor emergency disconnects for dwelling units,
- circuit current rating for switchboards,
- switchgear, and panelboards,
- grounding and bonding of HVAC equipment on rooftops,
- areas covered and not covered in health care facilities,
- manufactured buildings and relocatable structures,
- GFPE and GFCI protection at marinas, boatyards and docking facilities, splash

Key changes in 2021 IBC:

- Puzzle rooms (escape rooms) are now defined and regulated as special amusement areas, requiring compliance with Section 411 and special means of egress requirements.

- For the purposes of determining the allowable number of control areas in a building, each portion separated by one or more fire walls is now considered as a separate building.
- In Group E occupancies, enhanced classroom acoustics in compliance with ICC A117.1 are to be provided in all classrooms having of volume of 20,000 cubic feet or less.
- The requirements for metal composite materials and systems (MCM) installed on the exterior walls of Types I, II, III and IV Construction were simplified and sprinkler allowances were deleted
- The use of intermodal shipping containers as buildings is now specifically addressed through provisions intended to supplement existing applicable IBC requirements.
- Automatic sprinkler protection is now required in Group S-2 open parking garages where any fire area exceeds 48,000 square feet.
- The 2017 edition of ICC A117.1 was adopted.
- Parapets of a minimum height are now required for aggregate-surfaced roofs to prevent blow-off.
- Mixed occupancy buildings with assembly spaces are placed in Risk Category III when the total public assembly occupant load is greater than 2500 people.
- The 2021 IBC snow map is updated to match ASCE 7-16 snow maps by adding a reference to ASCE 7 snow tables in states with large case study areas.
- Secondary rain loads are updated to be consistent with ASCE 7.
- Special inspection requirements were added to address the anchorage and connection of mass timber structural elements.
- Installation of firestop, fire-resistant joint systems and perimeter fire barrier systems in residential-use buildings now requires special inspection in Group R fire areas having an occupant load exceeding 250 people.
- Frost protection for egress doors was added to the foundation requirements.
- ACI standards ACI 117 and ITG 7 were added by reference to provide acceptable tolerances for concrete construction.
- Three new types of construction (Types IV-A, IV-B, and IV-C) allow mass timber buildings of taller heights, more stories above grade, and greater allowable areas compared to existing provisions for heavy timber buildings.

Key changes in the 2021 IMC:

- Clothes dryer exhaust terminals required to be at least 3 feet from any opening into a building.
- Polyurethane spray-applied foam on the exterior of ducts in attics and crawl spaces required to meet specific smoke and flame index limits.
- Fire and smoke dampers must be provided with approved access for inspection and maintenance.
- Refrigerant tables updated to include new refrigerants.
- Addition of condensate termination identification markings and discharge restrictions.
- Approved factory-built combination intake/exhaust terminations permitted, relaxing separation requirement.
- 30% reduction in minimum mechanical ventilation for whole-house balanced ventilation systems.
- Continuous operation requirement for manicure and pedicure station exhaust systems.
- Grease duct horizontal cleanout required within 3 feet of a horizontal discharge fan.

Key changes in the 2021 IFGC:

- The termination of concealed condensate piping requires marking to indicate if it is the primary drain or the secondary drain.
- Press-connect joints are acceptable for high pressure (over 5 psig) applications indoors.
- Commercial cooking appliances are not allowed within dwelling units.

Key changes in the 2021 IPC:

- Multiple-user toilet facilities to serve all genders are now permitted.
- Two new methods for relining/rehabilitation of existing sewers are added.
- Accommodations for mounted roof top solar panels over vent terminals is added.
- CSA B805/ICC 805 Rainwater Harvesting Systems is allowed as an alternative design method.
- Plumbing provisions from *ICC A117.1-2017 Standard for Usable and Accessible Buildings and Facilities* are now included.