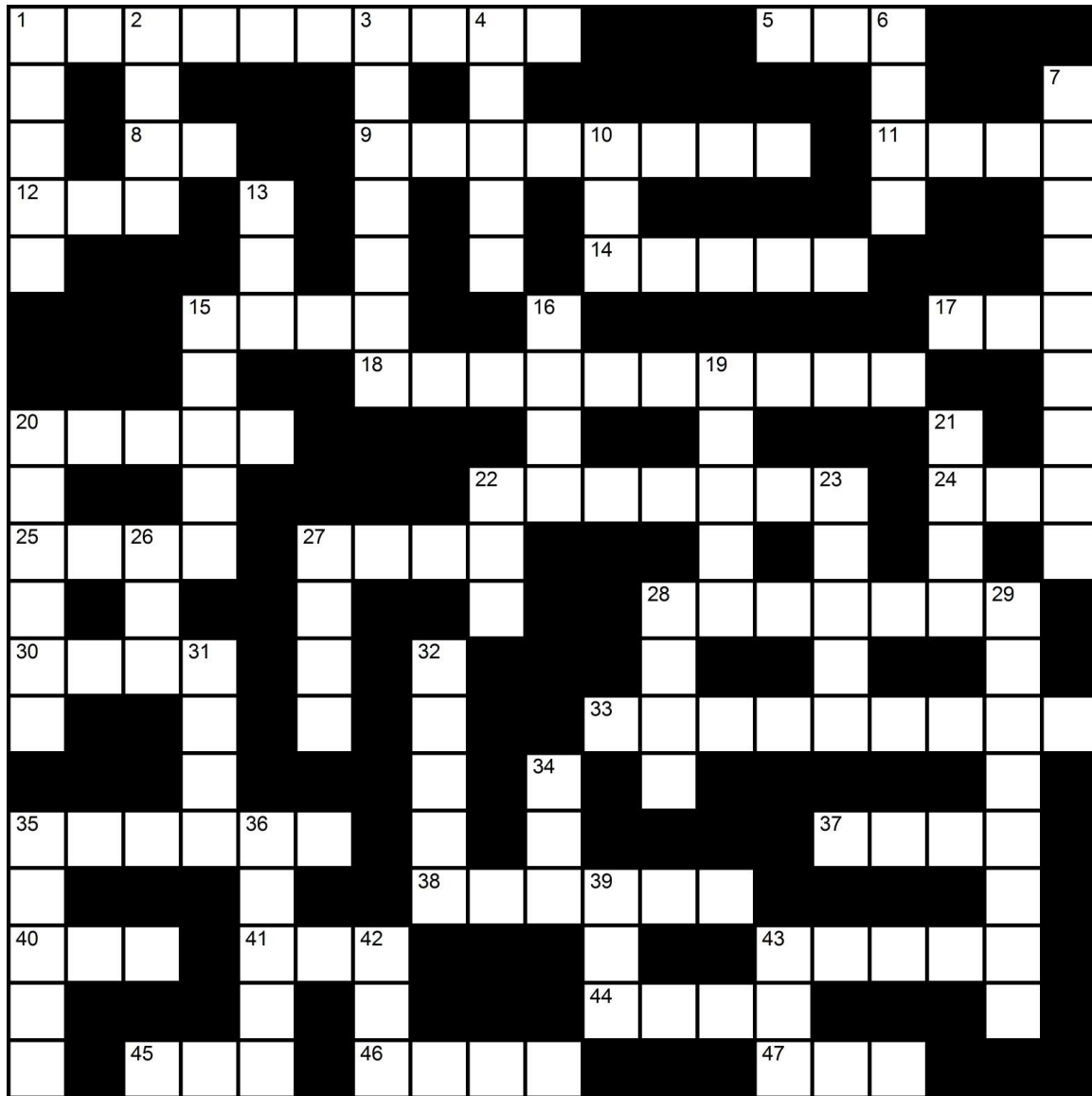


Decoded Crossword – Part 1

www.iDigHardware.com

Each clue is linked to a related article or website, in case you need a hint or want to learn more. The numbers in () indicate the quantity of letters in the answer. Good luck!



Abbreviations:

ADA = Americans with Disabilities Act
BHMA = Builders Hardware Manufacturers Association
DHI = Door Security + Safety Professionals
IBC = International Building Code
ICC = International Code Council

IFC = International Fire Code
LBL = Less Bottom Latch
LBR = Less Bottom Rod
NFPA = National Fire Protection Association
SDI = Steel Door Institute

Across

- 1** NFPA 101 is the ____ Code, which covers new and existing structures. (10)
- 5** Several products have now been listed for use on fire door assemblies where the clearance or _____ is greater than what is allowed by NFPA 80. (3)
- 8** The model codes require some types of access control systems to comply with _____ 294 - Standard for Access Control System Units. (2)
- 9** The 2019 edition of NFPA 80 clarified the requirements for job site preparations for the auxiliary fire pin that is typically installed with LBR ____ hardware. (8)
- 11** According to NFPA 80, a _____ is defined as "a structural component of the building that forms the bottom part of an opening over which a door closes." (4)
- 12** Panic hardware is typically operated by a touchpad or cross _____ which releases the latch. (3)
- 14** On manually-operated sliding _____, the hardware must be exposed and usable from both sides in the fully-open position. (5)
- 15** The maximum allowable clearance at a 90-minute wood fire door is 1/8-inch, measured between the door _____ and the frame rabbet, on the pull side of the door. (4)
- 17** UL 1784 is the test standard for _____ leakage, which impacts the need for gasketing on smoke doors. (3)
- 18** _____ is the Standard for Fire Doors and Other Opening Protectives, referenced by the model codes. (10)
- 20** The 2018 IBC includes changes which clarify that mag-locks which comply with the IBC criteria can be installed on doors with _____ hardware. (5)
- 22** BHMA A156.19 requires low-energy operators to be actuated by a _____ act, such as pushing a wall-mounted actuator, using an access control reader, or pushing/pulling the door slightly. (7)
- 24** Most US states have adopted either NFPA 1 / NFPA 101 or the _____ as the state fire code, with or without state modifications. (3)
- 25** For most door openings, the IBC requires a clear opening width of 32 inches, but 41 1/2 inches of clear width are required for doors that must accommodate the movement of _____ in health care facilities. (4)

- 27** The accessibility standards require manually-operated doors to close from 90 degrees to 12 degrees in no less than _____ seconds. (4)
- 28** The monthly column on codes that is published in each issue of Door Security + Safety Magazine is called _____. (7)
- 30** _____Hardware.com is a helpful source of information regarding the codes and standards that apply to door openings. (4)
- 33** Beginning with the 2017 edition of the BHMA A156.10 standard, presence sensors must be _____, to improve the safety of power-operated pedestrian doors. (9)
- 35** Each component of a fire door assembly must be listed for that purpose, including accessories like a door cord or door position _____. (6)
- 37** When a delayed egress lock is installed on an inswinging door, the signage is required to state: " _____ until alarm sounds. Door can be opened in 15 seconds." (4)
- 38** Controlled egress (an electrified lock which does not allow egress under normal conditions) is allowed by the model codes in _____ care units where the patients require containment for their safety or security. (6)
- 40** With the exception of dwelling units and sleeping units, egress doors serving most rooms and spaces must unlatch with _____ releasing operation. (3)
- 41** The fire marshal and building inspector are two examples, but there may be multiple people who are considered the _____ for a particular building. (3)
- 43** When a door is in the fully-open position, it can not encroach upon the required egress corridor width by more than _____ inches. (5)
- 44** Beginning with the 2010 edition of NFPA 80, glazing in _____ fire doors must be installed at the door manufacturer or under that manufacturer's label service. (4)
- 45** The requirements for annual inspections of fire door assemblies are being enforced by the Joint Commission in health care facilities, since _____ adopted the 2012 edition of NFPA 101. (3)
- 46** The IBC section called " _____ Locks" addresses flush bolts and surface bolts on pairs of doors; this section does not address deadbolts. (4)
- 47** The _____ is responsible for publishing the International Building Code and International Fire Code, along with many other codes and standards. (3)

Down

- 1** NFPA 101 allows doors serving an elevator _____ to be electrically locked, but the IBC requires each of these spaces to have a code-compliant means of egress. (5)
- 2** Although NFPA 101 allows stairwell doors serving _____ stories or less to be mechanically locked on the stair side, in most use groups the IBC requires requires stairwell doors at all levels to allow reentry. (4)
- 3** The 2017 edition of ICC A117.1 limits the operable force of door hardware to _____ pounds with a pushing/pulling motion, or 28 inch-pounds of rotational motion. (7)
- 4** If a door has a vision light or sidelight that is installed less than 66 inches above the floor, the bottom of at least one light must be located no more than forty-_____ inches above the floor. (5)
- 6** When an electrified lock is released by a sensor to allow egress, the lock must also be released by a wall-mounted button marked " _____ to exit." (4)
- 7** The ADA Guide recommends that door pulls have at least 1 1/2 inches of _____ behind the pull. (9)
- 10** Where more than one exit or exit access doorway is required, the length of a dead-_____ corridor (a corridor with no outlet) is limited by the IBC and NFPA 101. (3)
- 13** An auxiliary fire pin is typically needed when fire exit hardware is installed less-bottom-_____ (LBR) / less-bottom-latch (LBL). (3)
- 15** When an area in a building has an occupant load of more than 1,000 people, the IBC requires that the room have access to at least 4 _____. (5)
- 16** According to the IBC, a _____ is an example of Use Group U - Utility and Miscellaneous, which also includes livestock shelters and stables. (4)
- 19** A free code reference _____ is available for download from the iDigHardware website. (5)
- 20** The 2017 edition of ICC A117.1 includes some new requirements for automatic operators installed on _____ entrances. (6)
- 21** _____ door assemblies are opening protectives which help to deter the spread of smoke, flames, and toxic gasses during a fire. (4)
- 22** Although it is often used to unlock a door, a _____ is not addressed by the accessibility standards, because it is not considered an operable part of the door hardware. (3)

- 23** Even in masonry construction, hollow metal frames are not typically required by code to have _____ applied to the inside of the frame. (5)
- 26** _____ is an organization serving door security and safety professionals, which conducts the Fire + Egress Door Assembly Inspection Program (FDAI). (3)
- 27** Electric strikes installed on fire door assemblies are required to be _____ secure, to facilitate positive latching. (4)
- 28** In certain occupancies, NFPA 101 mandates annual egress _____ inspections for openings equipped with panic hardware or electrified hardware, and for doors serving exit enclosures. (4)
- 29** One of the few locations where a latchset/lockset and separate deadbolt may be installed is on the entrance door to a _____ unit or sleeping unit. (8)
- 31** Tactile warning on door hardware involves a knurled surface or applied _____ on the knob or lever on doors leading to hazardous areas, but this is no longer required by the ADA standards or ICC A117.1. (4)
- 32** According to NFPA 101, most corridor doors in health care facilities are required to have a positive _____, even if they are not fire doors. (5)
- 34** Accessibility requirements for doors, doorways, and gates are addressed in Section 404 of the _____ Standards for Accessible Design. (3)
- 35** NFPA 101 mandates limited airflow (which often requires gasketing) where doors must be _____-leakage-rated, or where they are required to comply with NFPA 105. (5)
- 36** The 2018 edition of the IBC was modified to allow delayed egress locks to be used on _____ rooms with an occupant load of less than 50 people. (5)
- 39** The Americans With Disabilities Act is a federal civil rights _____ which prohibits discrimination against individuals with disabilities in public and private places that are open to the general public. (3)
- 42** According to NFPA 80, a 1-inch diameter hole, field-drilled in a fire door for the installation of surface-mounted hardware, is considered a _____ site preparation. (3)
- 43** An organization called _____ represents manufacturers of hollow metal doors and frames, and is responsible for the standards addressing those products. (3)