

5.1 GENERAL

As used in 521 CMR, the following words shall have the meaning set forth in 521 CMR 5 unless the context otherwise requires.

- 5.2 ACCESS AISLE:** An *accessible* pedestrian space between elements such as parking spaces, seating, or desks that provides clearances complying with 521 CMR.
- 5.3 ACCESSIBLE:** A *site, building, facility* or portion thereof that complies with 521 CMR and that can be approached, entered, and used *by persons with disabilities*. When the term "*accessible*" is used, it shall mean both physical and communication accessible unless otherwise noted in 521 CMR.
- 5.4 ACCESSIBLE ELEMENT:** An element complying with 521 CMR that can be used by *persons with disabilities* (for example, telephone, controls, appliances, equipment and the like).
- 5.5 ACCESSIBLE ROUTE:** A continuous, unobstructed path connecting all *accessible* elements and spaces within or between *buildings* or *facilities*. Interior *accessible routes* may include corridors, floors, *ramps*, elevators, lifts, and *clear floor space* at fixtures. Exterior *accessible routes* may include parking, *access aisles*, *curb cuts*, crosswalks at vehicular ways, *walks*, *ramps*, and lifts.
- 5.6 ACCESSIBLE SPACE:** Space that complies with 521 CMR and that can be used by *persons with disabilities*.
- 5.7 ADAPTABILITY:** The ability of certain *building* spaces and elements, such as kitchen counters, sinks, and grab bars, to be added or altered so as to accommodate the needs of persons with or without disabilities or with different types or degrees of disability.
- 5.8 ADAPTABLE:** Can readily be made *accessible* to, functional for, and safe for use by *persons with disabilities* without *structural change*.
- 5.9 ADDITION:** An extension or increase in floor area or height of a *building* or structure.
- 5.10 ADMINISTRATIVE AUTHORITY:** A governmental agency that adopts or enforces regulations for the design, construction, or alteration of *buildings* and *facilities*.
- 5.11 ALTERATIONS:** A change or modification of a *building* or structure, or portion thereof, that requires a building permit. Alterations shall include but not be limited to: *remodeling*, renovation, rehabilitation, *reconstruction*, historic restoration, changes or rearrangements in the plan configuration of walls and full height partitions, and any *repairs* which require a building permit. Ordinary *repairs* as defined in 780 CMR: The State Building Code are not alterations.
- 5.12 AREA OF RESCUE ASSISTANCE:** An area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.
- 5.13 ASSEMBLY AREA:** A room or space accommodating a group of individuals for recreational, educational, political, social, or amusement purposes or for the consumption of food and drink.
- 5.14 ASSISTIVE LISTENING SYSTEM:** An *assistive listening system* picks up sound at or close to its source, amplifies it, and delivers it to the listener's ear without extraneous sound, reverberation and distortion via a telecoil on the individual's hearing aid and through earphones. An *assistive listening system* may stand alone or augment a conventional public address or audio address system, depending on the requirements of the room. The type of *assistive listening system* appropriate for a particular application depends on the characteristics of the setting, the nature of the program, and the intended audience. Magnetic induction loops, infra-red and radio frequency systems are types of listening systems that are appropriate for various applications.
- 5.15 AUTOMATIC DOOR:** A door equipped with a power-operated mechanism and controls which open and close the door automatically. The switch that begins the automatic cycle may be a photoelectric device, floor mat, or manual switch (see *power-assisted door*).

DEFINITIONS

- 5.16 BATHROOM:** A space or a series of interconnected spaces that contain a toilet, sink, and bathtub or shower.
- 5.17 BOARD:** The Architectural Access Board within the Executive Office of Public Safety, Commonwealth of Massachusetts.
- 5.18 BRAILLE:** A standardized system for communicating in writing with persons who are blind. Grade II Braille is standard literary Braille. Standard dimensions for literary Braille are as follows: Dot diameter: .059 inches; Inter-dot spacing: .090 inches; Horizontal separation between cells: .241 inches; and Vertical separation between cells: .395 inches.
- 5.19 BRIDGE PLATE:** An element which makes the final transition between a fixed or floating platform and a vehicle or vessel.
- 5.20 BUILDING:** A structure enclosed within exterior walls or fire walls (**as defined in 780 CMR**), built, erected and framed in a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of persons, animals or property. For the purposes of this definition, "roof " shall include an awning or similar covering, whether or not permanent in nature. The word "*building*" shall be construed where the context requires, as though followed by the words "or part or parts thereof." **For application of 521 CMR, each portion of a *building* which is separated from other portions by fire walls (as defined in 780 CMR) and are not dependent on the existing *building* for *accessible* elements shall be considered as a separate *building*.**
- 5.21 CHANGE OF USE:** Varying the use of a *building* from a private use to one that is open to and used by the public.
- 5.22 CLEAR:** Unobstructed.
- 5.23 CLEAR FLOOR SPACE:** The minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant. Unless otherwise stated, the dimensions of *clear floor space* shall be 30 inches by 48 inches (30" by 48" = 762mm by 1219mm) and shall be *level*.
- 5.24 CLOSED CIRCUIT TELEPHONE:** A telephone with dedicated line(s), such as a house phone, courtesy phone, or security gates with intercoms, that require voice communication to obtain clearance to enter a *facility* or *project*.
- 5.25 COMMON USE:** Refers to those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, occupants of homeless shelters, office buildings, residences or the guests of such occupants).
- 5.26 COMMUTER RAIL:** Short-haul passenger service operating in metropolitan and suburban areas, whether within or across geographical boundaries of a state, usually characterized by reduced fare, multiple ride, and commutation tickets, and by morning and afternoon peak period operations. This term does not include light or rapid rail transportation.
- 5.27 COMPLEX:** Multiple housing developed on one or more sites by a single entity.
- For complexes currently owned or financed by public agencies, including local housing authorities, Massachusetts Housing Finance Agency, or Housing and Urban Development, the *complex* means the whole of one or more residential structures and appurtenant structures, equipment, roads, walks, and parking lots which a single entity owns, within a municipality, and is or will be covered by a single mortgage contract for permanent financing or was originally constructed or acquired under one contract for financial assistance for new construction or acquisition
- 5.28 CONSTRUCTION:** Work for which a building permit is required, work determined to be *construction* by a state or local building inspector, or work for which a certificate of occupancy is necessary upon completion.
- 5.29 CROSS SLOPE:** The slope that is perpendicular to the *running slope* and the direction of travel.

5.30 CURB CUT: A short ramp cutting through a curb.

DEFINITIONS

- 5.31 DETECTABLE WARNING:** A standardized surface feature built in or applied to walking surfaces or other elements to give warning of hazards on a circulation path.
- 5.32 DWELLING UNIT:** A unit providing living facilities for one or more persons. (See **521 CMR 8** for more detailed information.)
- 5.33 EGRESS, MEANS OF:** A continuous and unobstructed path of travel from any point in a *building* or structure to a public way and consisting of three separate and distinct parts: (a) the exit access, (b) the exit, and (c) the exit discharge. A *means of egress* comprises the vertical and horizontal means of travel and shall include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards.
- An *accessible means of egress* is one that complies with 521 CMR and does not include stairs, steps, or escalators. *Areas of rescue assistance* or evacuation elevators may be included as part of *accessible means of egress*.
- 5.34 ELEMENT:** An architectural or mechanical component of a *building, facility, space* or *site*, e.g., telephone, curb cut, door, drinking fountain, seating, or water closet.
- 5.35 ENTRANCE:** Any access point to a *building* or portion of a *building* or *facility* used for the purpose of entering. An *entrance* includes the approach *walk*, stairs, lifts, ramp or other vertical access leading to the entrance platform; the entrance platform itself; vestibules, if provided; the entry door(s) or gate(s); and the hardware of the entry door(s) or gate(s).
- 5.36 FACILITY:** All or any portion of *buildings*, structures, *site* improvements, *complexes*, equipment, roads, *walks*, passageways, parking lots, or other real or personal property located on a *site*.
- 5.37 FINAL DECISION:** Determination of the *Board*, arrived at after consideration of the facts brought to its attention in accordance with 521 CMR.
- 5.38 FULL AND FAIR CASH VALUE OF THE BUILDING:** The assessed valuation of a *building* (not including the land) as recorded in the Assessor's Office of the municipality at the time the *building* permit is issued as equalized at 100% valuation.

EXCEPTIONS:

- a. If no assessed value exists, or the assessed value is more than three years old, a request to substitute the appraised value may be submitted to the *Board*. The request to use the appraised value must be submitted by a certified appraiser or for transit facilities, either a certified appraiser or an independent registered professional engineer and must be submitted prior to obtaining a building permit for the project.
- b. The value of *multiple dwellings* owned or financed by public sector agencies, local housing authorities, Massachusetts Housing Finance Agency, or the Department of Housing and Urban Development shall be determined by *replacement cost*.
- c. The value of buildings owned, constructed, or renovated by the Commonwealth of Massachusetts shall be determined by the **replacement cost**.

The 100% equalized assessed value shall be based upon Massachusetts Department of Revenue's determination of the particular city's or town's assessment ratio.

EXAMPLE: Town X has an assessment ratio of 40%, the particular *building* in question is assessed at \$200,000.00. To determine the equalized assessed value of this *building*, divide \$200,000.00 by 0.4. The equalized assessed value equals \$500,000.00.

When part of a *building* is subject to 521 CMR, the *full and fair cash value* shall be based on the percentage of the *full and fair cash value* of the whole which equals the ratio of the square footage of the part of the *building* to the square footage of the whole *building*; if the *Board* determines the application of this formula to cause an inequitable result, the *Board* may otherwise calculate the *full and fair cash value* of the part of a *building* at issue.

EXAMPLE: Where the whole *building* is 100,000 square feet, the part in question is 10,000 square feet, and the equalized value of the whole is \$1,000,000.00, the *full and fair cash value* of the part is \$100,000.00

- 5.39 GROUND FLOOR:** The floor of a *building* closest to the level of the exterior grade and any floor within 36 inches (36" = 914mm) of an exterior grade at some or all of its perimeter. *Buildings* on sloped *sites* may have more than one *ground floor*. For *multiple dwellings* with a garage or commercial space at grade level, the first floor of *dwelling units* above the garage or commercial space shall be considered the *ground floor*.
- 5.40 GROUP 1:** Applies to *dwelling units* that have features that can be modified without *structural change* to meet the specific functional needs of an occupant with a disability.
- 5.41 GROUP 2A:** Applies to *dwelling units* that have features similar to Group 1, but have the additional feature of greater floor space to accommodate the needs of occupants who need such space due to their disability.
- 5.42 GROUP 2B:** Applies to *dwelling units* that contain features that provide, at the time of initial construction, full accessibility without need for further modification.
- 5.43 HALF BATHROOM:** A space with a toilet and a sink.
- 5.44 IMPRACTICABLE/IMPRACTICABILITY:** a) Compliance with 521 CMR would be technologically unfeasible, or b) compliance with 521 CMR would result in excessive and unreasonable costs without any substantial benefit to persons with disabilities.
- 5.45 LEVEL:** Sloped no more than 1:50 or 2%
- 5.46 LIGHT RAIL:** A *light rail* vehicle is a streetcar type vehicle operated on city streets, semi-exclusive rights of way, or exclusive rights of way.
- 5.47 LOFT:** An intermediate level between the floor and ceiling of any story, located within a room or rooms of a dwelling.
- 5.48 MARINE FACILITIES:** *Marine facilities* shall include, but not be limited to, piers, docks, wharves, bulkheads, seawalls, and any other fixed manmade structures at the land/water interface, and floating structures including barges, floating docks, and rafts which provide access from the water's edge to floating vessels including, but not limited to, boats, ships, ferries, or any other form of waterborne transportation.
- 5.49 MARINE RAMPS:** *Marine ramps* are ramps, gangways, or walkways with a maximum slope of 1:12, or with any slope that is less steep than 1:12, under nominal marine conditions, and which span from land or a fixed pier to a floating vessel or dock, or which are fixed to a floating structure.
- 5.50 MARKED CROSSING:** A crosswalk or other identified path intended for pedestrian use in crossing a *vehicular way*.
- 5.51 MEZZANINE OR MEZZANINE FLOOR:** An intermediate level between the floor and ceiling of any story with an aggregate floor area of not more than 33% of the floor area of the story in which the level is located.
- 5.52 MULTIFAMILY DWELLING:** Any *building* containing more than two dwelling units.
- 5.53 MULTIPLE DWELLING:** A lodging or residential facility for hire, rent, lease, or sale, containing three or more *dwelling units*.
- 5.54 NOMINAL MARINE CONDITIONS:** Denotes a condition in the marine environment where physical facilities are unmoved by the effects of wind, waves, wakes, currents, and weather conditions.

DEFINITIONS

- 5.55 OCCUPIABLE:** A room or enclosed space designed for human occupancy in which individuals congregate for amusement, education or similar purposes, or in which occupants are engaged in labor, and which is equipped with *means of egress*, light, and ventilation.
- 5.56 OPERABLE PART:** A part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example, coin slot, push-button, handle).
- 5.57 ORDINARY REPAIRS:** Any maintenance which does not affect structure, egress, fire protection systems, fire ratings, energy conservation provisions, plumbing, sanitary, gas, electrical or other utilities.
- 5.58 PERSONS WITH DISABILITIES:** Individuals who experience substantial limitations in one or more major life activities, including but not limited to such functions as performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working. *Persons with disabilities* shall include but not be limited to those who have the inability to walk, difficulty walking, hearing disabilities, lack of coordination, reaching and manipulation disabilities stamina, difficulty interpreting and reacting to sensory information and extremes in physical size.
- 5.59 POWER-ASSISTED DOOR:** A door with a mechanism that helps to open the door or that reduces the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.
- 5.60 PRIMARY FUNCTION AREA:** A major activity for which the *facility* is intended. Areas that contain a primary function include, but are not limited to: the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and all other work areas in which the activities of the public are carried out.
- 5.61 PROJECT:** See **521 CMR 5.27 Complex**
- 5.62 PUBLIC BUILDING:**
- A *building* privately or publicly financed that is open to and used by the public, including but not limited to transportation terminals, institutional buildings, educational buildings, commercial buildings, buildings having places of assembly, hotels, motels, dormitories, *multiple dwellings* consisting of three or more units, 5% of the units in lodging or residential facilities for rent, hire or lease containing 20 or more units, public use and common use areas of apartment buildings and condominiums, parking lots of 15 or more automobiles, public sidewalks and ways, funeral homes, and public rest rooms, and public areas of shopping centers and restaurants.
 - A *building* constructed by the Commonwealth or any political subdivision thereof with public funds and open to public use, including but not limited to those constructed by public housing authorities, the Massachusetts Port Authority, the Massachusetts Parking Authority, the Massachusetts Turnpike Authority, the Massachusetts Bay Transportation Authority, and building authorities of any public educational institution or their successors.
- 5.63 PUBLIC USE:** Describes interior or exterior rooms or spaces that are made available to the general public. Public use may be provided at a *building* or *facility* that is privately or publicly owned.
- 5.64 RAMP:** A walking surface that has a running slope greater than 1:20 but no greater than or equal to 1:12.
- 5.65 RAPID RAIL:** A subway type transit vehicle railway operated on exclusive private rights of way with high level platforms. Rapid rail may be operated on elevated or at grade level track separated from other traffic.
- 5.66 REASONABLE MODIFICATION:** Physical changes to *multiple dwellings* requested by *persons with disabilities* or their agents to enable full use and enjoyment thereof, as described in M.G.L., c. 151B, § 4(a), or St. 1989, c. 722.

- 5.67 RECONSTRUCTION:** The tearing down, removal, demolition or replacement of a *public building* or part of a *public building*.
- 5.68 REMODELING:** Modification beyond an interior decoration or involving any *structural changes*, or the redecorating of a *public building* for which the cost of such refurbishing, updating or redecorating equals or exceeds 5% of the *full and fair cash value of the building*.
- 5.69 REPAIR:** The *reconstruction* or renewal of any part of an existing *building* for the purpose of its maintenance.
- 5.70 REPLACEMENT COST:** Current cost of construction and equipment for a newly constructed *building* composed of the same number of units and bedroom types. Building size and cost per square foot is established in Table X below and will be periodically updated by the *Board*.

Table X		
<u># of Bedrooms:</u>	<u>Square Footage</u>	<u>S.F. x \$73.32</u>
0	750	\$55,000
1	950	\$69,700
2	1145	\$84,000
3	1344	\$98,500
4	1575	\$115,500
5	1800	\$132,000

- 5.71 RUNNING SLOPE:** The slope that is parallel to the direction of travel and perpendicular to the *cross slope*.
- 5.72 SERVICE ENTRANCE:** An entrance intended primarily for delivery of goods or services.
- 5.73 SIDEWALK:** A prepared *walk* within a street right of way.
- 5.74 SIGNAGE:** Displayed verbal, symbolic, tactile, and/or pictorial information.
- 5.75 SITE:** A parcel of land bounded by a property line, or a designated portion of a public right-of-way.
- 5.76 SITE IMPROVEMENT:** Landscaping, paving for pedestrian and vehicular ways, outdoor lighting, recreational facilities, and the like, added to a *site*.
- 5.77 SLEEPING ACCOMMODATIONS:** Rooms in which people sleep; for example, dormitory and hotel or motel guest rooms or suites.
- 5.78 SPACE:** A definable area, e.g., room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.
- 5.79 SPRING TIDE RANGE:** The *spring tide range* for coastal communities in Massachusetts shall be that number published in "Table 2 - Tidal Difference and other Constants" of the current: Tide Tables - High and Low Tide Predictions East Coast of North America and South America including Greenland as published by the U.S. Department of Commerce, National Oceanographic and Atmospheric Administration, National Ocean Service.
- 5.80 STORY:** That portion of a *building* included between the upper surface of a floor and upper surface of the floor or roof next above. If such portion of a *building* does not include occupiable space, it is not considered a *story* for the purposes of 521 CMR. There may be more than one floor level within a *story* as in the case of a *mezzanine* or *mezzanines*.
- 5.81 STRUCTURAL CHANGE:** *Structural change* includes major *reconstruction* of walls or partitions or relocation of bearing walls or partitions. Minor alterations including the opening of sections of walls and/or the relocation of equipment or fixtures is not considered a *structural change*.

DEFINITIONS

- 5.82 STRUCTURAL FRAME:** The *structural frame* shall be considered to be the columns and the girders, beams, trusses, foundation and spandrels having direct connections to the columns and all other members that are essential to the stability of the *building* as a whole.
- 5.83 STRUCTURAL STRENGTH:** *Structural strength* of grab bars, shower seats, fasteners and mounting devices shall be as follows:
- Bending stress in a grab bar or seat induced by the maximum bending moment from the application of 250 lbs. shall be less than the allowable stress for the material of the grab bar or seat.
 - Shear stress induced in a grab bar or seat by the application of 250 lbs. shall be less than the allowable shear stress for the material of the grab bar or seat. If the connection between the grab bar or seat and its mounting bracket or other supports is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress.
 - Shear force induced in a fastener or mounting device from the application of 250 lbs. shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.
 - Tensile force induced in a fastener by direct tension force of 250 lbs. plus the maximum moment from the application of 250 lbs. shall be less than the allowable withdrawal load between the fastener and the supporting structure
 - Grab bars shall not rotate within their fittings.
- 5.84 TACTILE:** Describes an object that can be perceived using the sense of touch.
- 5.85 TACTILE WARNING:** A surface texture applied to or built into walking surfaces or other elements to warn visually impaired persons of hazards in the path of travel.
- 5.86 TEXT TELEPHONE (TTY):** Technology which employs interactive graphic (i.e. typed) communications through the transmission of coded signals across the standard telephone network. These devices are also known as TDD's.
- 5.87 TIER I:** *Tier I* marine facilities are docks and/or piers that service scheduled, waterborne passenger vessels with a vessel length of 40 feet (40' = 12m) or greater. These facilities will provide persons with disabilities unassisted access under nominal marine conditions.
- 5.88 TOWNHOUSE:** A *dwelling unit* with finished living space on more than one *story*.
- 5.89 TRANSIENT LODGING:** A *building, facility*, or portion thereof, excluding inpatient medical care facilities, that contains one or more *dwelling units* or sleeping accommodations not intended for permanent residence. Transient lodging may include but is not limited to resorts, group homes, hotels, motels, and dormitories.
- 5.90 TRANSIT FACILITY:** A physical structure whose primary function is to facilitate access to and from a transportation system which has scheduled stops at the structure.
- 5.91 TRANSIT PLATFORM:** A boarding area for rail transit vehicles.
- 5.92 TRANSITION PLATE:** A *transition plate* is that element connected to the end of a moving *marine ramp* which provides access from the end of the *marine ramp* to a *level* platform.
- 5.93 UNASSISTED ACCESS:** *Unassisted access* enables a *person with a disability* to obtain information about and to maneuver a path of travel without the assistance of another person, except at those points and under those conditions under which individuals without disabilities would be in need of assistance from another person. This definition does not restrict the right of a *person with a disability* to request and receive assistance.
- 5.94 USE:** Purpose for which the *building* is designed, used or intended to be used.

- 5.95 VEHICULAR WAY:** A route intended for vehicular traffic, such as a street, driveway, or parking lot.
- 5.96 VESSEL LENGTH:** *Vessel length* means the straight line horizontal measurement of the overall length from the foremost part of the boat to the aftermost part of the boat, measured from end to end over the deck, excluding sheer, and measured parallel to the centerline. Bow sprits, bumpkins, rudders, outboard motor brackets, handles, and other similar fittings, attachments, and extensions are not included in the measurement.
- 5.97 WALK (WALKWAY):** An interior or exterior pathway with a prepared surface intended for pedestrian use, including but not limited to general pedestrian areas such as plazas, courts and crosswalks.
- 5.98 VARIANCE:** Modification of or substitution for a Rule or Regulation.
- 5.99 ZONE OF REACH:** An operable mechanism is within reach if it meets either criteria outlined in **521 CMR 6.5 Forward Reach** or **521 CMR 6.6 Side Reach**.