**Chapter 3 Definitions**

3.1 General

The definitions contained in this chapter shall apply to the terms used in this Code. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. Merriam-Webster's Collegiate Dictionary, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions

3.2.1\* Approved

Acceptable to the AHJ.

3.2.2\* Authority Having Jurisdiction (AHJ)

An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3\* Code

A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

3.2.4 Guide

A document that is advisory or informative in nature and that contains only nonmandatory provisions. A guide may contain mandatory statements such as when a guide can be used, but the document as a whole is not suitable for adoption into law.

3.2.5 Labeled

Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.6\* Listed

Equipment, materials, or services included in a list published by an organization that is acceptable to the AHJ and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.7 Recommended Practice

A document that is similar in content and structure to a code or standard but that contains only nonmandatory provisions using the word "should" to indicate recommendations in the body of the text.

3.2.8 Shall

Indicates a mandatory requirement.

3.2.9 Should

Indicates a recommendation or that which is advised but not required.

3.2.10 Standard

An NFPA Standard, the main text of which contains only mandatory provisions using the word "shall" to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase "standards development process" or "standards development activities," the term "standards" includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3 General Definitions

Diagram

UpCodes Diagrams

P

Means of Egress: Basic Components (NFPA)

3.3.1\* Absolute Pressure

Pressure based on a zero reference point, the perfect vacuum. [55,2020]

3.3.2 Access Box

An approved secure box, accessible by the AHJ's master key or control, containing entrance keys or other devices to gain access to a structure or area.

3.3.3 Addition

An increase in the building area, aggregate floor area, building height or number of stories of a structure. [5000,2021]

3.3.4 Additive Manufacturing

A process of joining materials to make objects from 3D model data, usually layer upon layer, sometimes referred to as 3D printing.

3.3.4.1 Industrial Additive Manufacturing

3D printing operations that utilize combustible powders or metals, an inert gas supply, or a combustible dust collection system or that create a hazardous electrical classification area outside of the equipment.

3.3.4.2 Nonindustrial Additive Manufacturing

3D printing operations that do not create a hazardous electrical classification area outside of the equipment and do not utilize an inert gas supply or combustible dust collection system.

3.3.5\* Aerosol Products

A nonrefillable combination of an aerosol container, aerosol propellant, and aerosol valve, with or without a base product, that is dispensed through the aerosol valve. [30B,2019]

3.3.6 Airport (Aerodrome)

An area on land or water that is used or intended to be used for the landing and takeoff of aircraft and includes buildings and facilities. [402,2019]

3.3.7 Airport Ramp

Any outdoor area, including aprons and hardstands, where aircraft can be positioned, stored, serviced, or maintained, irrespective of the nature of the surface of the area. [415, 2016]

3.3.8\* Aisle Width

The horizontal dimension between the face of the loads in racks under consideration. [13,2019]

3.3.9 Alarm

An indication of the existence of a condition that requires immediate response. [72,2019]

3.3.10 Alarm Signal

See 3.3.251.1.

3.3.11 Alcohol-Based Hand Rub

An alcohol-containing preparation designed for application to the hands for reducing the number of visible microorganisms on the hands and containing ethanol or isopropanol in an amount not exceeding 95 percent by volume.

3.3.12 Alleyway

An accessible clear space between storage piles or groups of piles suitable for housekeeping operations, visual inspection of piling areas, and initial fire-fighting operations.

3.3.13 ANSI/ASME

The designation for American National Standards Institute publication sponsored and published by the American Society of Mechanical Engineers.

3.3.14 Area

3.3.14.1 Back Stock Area

The area of a mercantile occupancy that is physically separated from the sales area and not intended to be accessible to the public. [30B,2019]

3.3.14.2 Control Area

A building or portion of a building or outdoor area within which hazardous materials are allowed to be stored, dispensed, used, or handled in quantities not exceeding the maximum allowable quantities (MAQ). [400,2019]

3.3.14.3 Fire Area

An area of a building separated from the remainder of the building by construction having a fire resistance of at least 1 hour and having all communicating openings properly protected by an assembly having a fire resistance rating of at least 1 hour. [30,2021]

Upcodes Diagrams

3.3.14.4 Fire Flow Area

The floor area, in square feet, used to determine the required fire flow.

3.3.14.5 Indoor Area

An area that is within a building or structure having overhead cover, other than a structure qualifying as "weather protection." [55,2020]

3.3.14.6 Inside Liquid Storage Area

A room or building used for the storage of liquids in containers or portable tanks, separated from other types of occupancies. [30,2021]

3.3.14.7 Organic Peroxide Storage Area

An area used for the storage of organic peroxide formulations. [400,2019]

3.3.14.8 Outdoor Area

An area that is not an indoor area. [55,2020]

3.3.14.9 Permissible Areas

3.3.14.9.1 Designated Area

A specific location designed and approved for hot work operations that is maintained fire-safe, such as a maintenance shop or a detached outside location, that is of noncombustible or fire-resistive construction, essentially free of combustible and flammable contents, and suitably segregated from adjacent areas. [51B, 2019]

3.3.14.9.2 Permit-Required Area

Any location other than a designated area that is approved for hot work and is made fire-safe by removing or protecting combustibles from ignition sources. [51B,2019]

3.3.14.10 Sales Display Area

The area of a mercantile occupancy that is open to the public for the purpose of viewing and purchasing goods, wares, and merchandise. Individuals are free to circulate among the items, which are typically displayed on shelves, on racks, or on the floor. [30B,2019]

3.3.14.11 Smoking Area

A designated area where smoking is permitted within a premises in which smoking is otherwise generally prohibited.

3.3.14.12\* Spray Area

Any fully enclosed, partly enclosed, or unenclosed area in which flammable or combustible vapors, mists, residues, dusts, or deposits are present due to the operation of spray processes, including (1) any area in the direct path of a spray application process; (2) the interior of a spray booth, spray room, or limited finishing workstation, as herein defined; (3) the interior of any exhaust plenum, eliminator section, or scrubber section; (4) the interior of any exhaust duct or exhaust stack leading from a spray application process; (5) the interior of any air recirculation path up to and including recirculation particulate filters; (6) any solvent concentrator (pollution abatement) unit or solvent recovery (distillation) unit; and (7) the inside of a membrane enclosure. The following are not part of the spray area: (1) fresh air make-up units; (2) air supply ducts and air supply plenums; (3) recirculation air supply ducts downstream of recirculation particulate filters; and (4) exhaust ducts from solvent concentrator (pollution abatement) units. [33,2018]

3.3.15 ASME

American Society of Mechanical Engineers. [58,2020]

3.3.16 ASME Container (or Tank)

See 3.3.72.1.

3.3.17 ASTM

American Society for Testing and Materials, now known as "ASTM International." [55,2020]

3.3.18 Automatic Emergency Shutoff Valve

A designated fail-safe automatic closing valve designed to shut off the flow of gases or liquids that is initiated by a control system where the control system is activated by either manual or automatic means. [55,2020]

3.3.19\* Baled Cotton

A natural seed fiber wrapped and secured in industry-accepted materials, usually consisting of burlap, woven polypropylene, or sheet polyethylene, and secured with steel, synthetic, or wire bands, or wire; also includes linters (lint removed from the cottonseed) and motes (residual materials from the ginning process).

3.3.19.1 Block

A basic yard storage unit for baled cotton comprising multiple-row storage with clear spaces on all sides.

3.3.19.2\* Densely Packed Baled Cotton

Cotton, made into banded bales, with a packing density of at least 22 lb/ft3 (360 kg/m3), and dimensions complying with the following: a length of 55 in. (ca. 1400 mm ± 20 mm), a width of 21 in. (ca. 530 mm ± 20 mm), and a height of 27.6 in. to 35.4 in. (700 mm to 900 mm).

3.3.19.3 Fire-Packed Baled Cotton

A cotton bale within which a fire has been packed as a result of a process in which ginning is the most frequent cause.

3.3.19.4 Naked Cotton Bale

An unwrapped cotton bale secured with wire or steel straps.

3.3.20 Barricade (Explosives or Fireworks)

A natural or artificial barrier that effectively screens a magazine, building, railway, or highway from the effects of an explosion in a magazine or building containing explosives. [1124, 2017]

3.3.20.1 Artificial Barricade

An artificial mound or revetted wall of earth of a minimum thickness of 3 ft (0.9 m). [1124, 2017]

3.3.20.2 Natural Barricade

A natural outdoor feature (s), such as hills or trees, with a density sufficient to prevent surrounding exposures that require protection from being seen from a magazine or building containing explosives when the trees are bare of leaves. [1124, 2017]

3.3.21 Barrel

A unit of volume used in the petroleum industry that is equal to 42 gal (159 L). [30,2021]

3.3.22 Basement

Any story of a building wholly or partly below grade plane that is not considered the first story above grade plane. (See also 3.3.289.1 in NFPA 5000®, First Story Above Grade Plane.) [5000,2021]

Upcodes Diagrams

3.3.23 Battery System

A system that consists of these interconnected subsystems: (1) stationary storage batteries, (2) battery chargers, and (3) a collection of rectifiers, inverters, converters, and associated electrical equipment as required for a particular application.

3.3.24 Battery Types, Stationary

3.3.24.1 Lithium-Ion Battery

A storage battery that consists of lithium ions imbedded in a carbon graphite or nickel metal-oxide substrate. The electrolyte is a carbonate mixture or a gelled polymer. The lithium ions are the charge carriers of the battery.

3.3.24.2 Lithium Metal Polymer Battery

A storage battery that is comprised of nonaqueous liquid or polymerized electrolytes, which provide ionic conductivity between lithiated positive active material electrically separated from metallic lithium or lithiated negative active material.

3.3.24.3 Nickel Cadmium (NiCad) Battery

An alkaline storage battery in which the positive active material is nickel oxide, the negative contains the cadmium, and the electrolyte is potassium hydroxide.

3.3.24.4\* Valve-Regulated (VRLA)

A lead-acid battery consisting of sealed cells furnished with a valve that opens to vent the battery whenever the internal pressure of the battery exceeds the ambient pressure by a set amount.

3.3.24.5\* Vented (Flooded)

A lead-acid battery consisting of cells that have electrodes immersed in liquid electrolyte.

3.3.25 Block

See 3.3.19.1.

3.3.26 Board of Appeals

A group of persons appointed by the governing body of the jurisdiction adopting this Code for the purpose of hearing and adjudicating differences of opinion between the AHJ and the citizenry in the interpretation, application, and enforcement of this Code.

3.3.27\* Boiling Point (BP)

The temperature at which the vapor pressure of a liquid equals the surrounding atmospheric pressure. [30,2021]

3.3.28\* Boil-Over

An event in the burning of certain oils in an open-top tank when, after a long period of quiescent burning, there is a sudden increase in fire intensity associated with expulsion of burning oil from the tank. [30,2021]

3.3.29\* Building

Any structure used or intended for supporting or sheltering any use or occupancy. [101,2021]

3.3.29.1\* Airport Terminal Building

A structure used primarily for air passenger enplaning or deplaning, including ticket sales, flight information, baggage handling, and other necessary functions in connection with air transport operations. This term includes any extensions and satellite buildings used for passenger handling or aircraft flight service functions. Aircraft loading walkways and "mobile lounges" are excluded. [415, 2016]

3.3.29.2 Apartment Building

See 3.3.199.2.

3.3.29.3 Attached Building

A building having only one common wall with another building having other types of occupancies.

3.3.29.4 Bulk Merchandising Retail Building

See 3.3.199.4.

3.3.29.5\* Existing Building

A building erected or officially authorized prior to the effective date of the adoption of this edition of the Code by the agency or jurisdiction. [101,2021]

3.3.29.6\* High-Rise Building

A building where the floor of an occupiable story is greater than 75 ft (23 m) above the lowest level of fire department vehicle access. [5000,2021]

Upcodes Diagrams

3.3.29.7\* Important Building

A building that is considered not expendable in an exposure fire. [30,2021]

3.3.29.8 Mini-Storage Building

See 3.3.199.31.1.

3.3.29.9 Satellite

A structure that can be adjacent to but separated from the airport terminal building, accessible above ground or through subway passages, and used to provide flight service operations, such as passenger check-in, waiting rooms, food service, enplaning or deplaning, etc. [415, 2016]

3.3.29.10\* Special Amusement Building

A building or portion thereof that is temporary, permanent, or mobile and contains a device or device that conveys patrons where the patrons can be contained or restrained, or provides a walkway along, around, or over a course in any direction as a form of amusement or entertainment, and arranged so that the egress path is not readily apparent due to visual or audio distractions, contains an intentionally confounded egress path, or is not readily available due to the mode of conveyance through the building or structure. [101,2021]

3.3.29.11 Storage Tank Building

A three-dimensional space that is enclosed by a roof and walls that cover more than one-half of the possible area of the sides of the space, is of sufficient size to allow entry by personnel, will likely limit the dissipation of heat or dispersion of vapors, and restricts access for fire fighting. [30,2021]

3.3.30 Bulk Hydrogen Compressed Gas System

See 3.3.278.1.

3.3.31 Bulk Inert Gas System

See 3.3.278.2.

3.3.32 Bulk Liquefied Hydrogen Gas System

See 3.3.278.3.

3.3.33 Bulk Oxygen System

See 3.3.278.4.

3.3.34 Bulk Plant or Terminal

That portion of a property where liquids are received by tank vessel, pipelines, tank car, or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle, portable tank, or container.

3.3.35 Burn-It

A fire-fighting strategy that allows for the free burn of a tire fire.

3.3.36 Bury-It

A fire-fighting strategy in which a tire pile is buried with soil, sand, gravel, cement dust, or other cover material.

3.3.37 Cannabis Extraction Equipment

Equipment or appliances used for the extraction of botanical material, such as essential oils, from cannabis.

3.3.38 Cannabis Extraction Facility

A building used for the solvent-based extraction process of cannabis.

3.3.39 Carbon Dioxide Enrichment Process

A process where carbon dioxide gas is intentionally introduced into an indoor environment for the purpose of accelerating plant growth.

3.3.40\* Cathodic Protection

A technique to resist the corrosion of a metal surface by making the surface the cathode of an electrochemical cell. [55,2020]

3.3.41 Cathodic Protection Tester

A person who demonstrates an understanding of the principles and measurements of all common types of cathodic protection systems applicable to metal piping and container systems and who has education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of metal piping and container systems. [55,2020]

3.3.42 Certificate of Fitness

A written document issued by the AHJ to any person for the purpose of granting permission to such person to conduct or engage in any operation or act for which certification is required.

3.3.43 CFR

The Code of Federal Regulations of the United States Government.

3.3.44 CGA

Compressed Gas Association.

3.3.45 Chemical Fume Hood

A ventilated enclosure designed to contain and exhaust fumes, gases, vapors, mists, and particulate matter generated within the hood interior. [45,2019]

3.3.46 Chemical Name

The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service rules of nomenclature, or a name that clearly identifies a chemical for the purpose of conducting an evaluation.

3.3.47 Chemical Plant

A large integrated plant or that portion of such a plant, other than a refinery or distillery, where liquids are produced by chemical reactions or used in chemical reactions. [30,2021]

3.3.48\* Chip

A wood chip of various species used in the manufacture of pulp.

3.3.49\* Cleaning Media

Materials used to clean piping systems. [55,2020]

3.3.50 Clean Zone

A defined space in which the concentration of airborne particles is controlled to specified limits. [318, 2018]

3.3.51 Cleanroom

A room in which the concentration of airborne particles is controlled to specified limits, including areas below the raised floor and above the ceiling grid if these areas are part of the air path and within the rated construction. [5000,2021]

3.3.52 Clear Space

An area free of combustible materials but that can contain noncombustible materials that cannot transmit an exposure fire.

3.3.53 Closed System Use

See 3.3.293.1.

3.3.54 Closed-Top Diking

A dike with a cover intended to minimize the entrance of precipitation into the diked area. [30,2021]

3.3.55 Clothes Dryer

A device used to dry wet laundry by means of heat derived from the combustion of fuel or from electric heating elements. [211,2019]

3.3.56 Code

3.3.56.1 Building Code

The building or construction code adopted by the jurisdiction. [55,2020]

3.3.56.2 Electrical Code

The electrical code referenced in Section 2.2.

3.3.56.3 Mechanical Code

The mechanical or mechanical construction code adopted by the jurisdiction. [55,2020]

3.3.56.4 Plumbing Code

The plumbing code referenced in Section 2.2.

3.3.57 Cold Deck

A single ranked pile of logs with individual logs of regular or irregular length usually 20 ft to 50 ft (6.1 m to 15.2 m) long, but greater than 8 ft (2.4 m) long.

3.3.58 Column (Paper)

A single vertical stack of rolls of paper.

3.3.59 Combustible (Material)

A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible. [101,2021]

3.3.60\* Combustible Dust

A finely divided combustible particulate solid that presents a flash fire hazard or explosion hazard when suspended in air or the process-specific oxidizing medium over a range of concentrations. [652, 2019]

3.3.61\* Combustible Fiber

Any material in a fibrous or shredded form that readily ignites when heat sources are present.

3.3.62 Combustible Liquid

See 3.3.178.1.

3.3.63 Combustible Particulate Solid

See 3.3.259.1.

3.3.64 Combustible Refuse

All combustible or loose rubbish, litter, or waste materials generated by an occupancy that are refused, rejected, or considered worthless and are disposed of by incineration on the premises where generated or periodically transported from the premises.

3.3.65\* Combustible Waste

Combustible or loose waste material that is generated by an establishment or process and, if salvageable, is retained for scrap or reprocessing on the premises where generated or transported to a plant for processing.

3.3.66 Combustion

A chemical process of oxidation that occurs at a rate fast enough to produce heat and usually light in the form of either a glow or flame.

3.3.67 Commodity

The combination of products, packing material, and container that determines commodity classification. [13,2019]

3.3.68\* Common Path of Travel

The portion of exit access that must be traversed before two separate and distinct paths of travel to two exits are available. [101,2021]

Upcodes Diagrams

3.3.69 Compartment

Upcodes Diagrams

3.3.69.1\* Fire Compartment

A space within a building that is enclosed by fire barriers on all sides, including the top and bottom. [101,2021]

3.3.69.2\* Smoke Compartment

A space within a building enclosed by smoke barriers on all sides, including the top and bottom. [101,2021]

3.3.70 Condition, Existing

See 3.3.109.

3.3.71 Construction Documents

Documents that consist of scaled design drawings and specifications for the purpose of construction of new facilities or modification to existing facilities. (See also 3.3.250, Shop Drawings.)

3.3.72 Container

A vessel, including cylinders, tanks, portable tanks, and cargo tanks, used for transporting or storing materials.

3.3.72.1 ASME Container

A container constructed in accordance with the ASME Code. [58,2020]

3.3.72.2 Compressed Gas Container

A pressure vessel designed to hold compressed gas at an absolute pressure greater than 1 atmosphere at 68°F (20°C) that includes cylinders, containers, and tanks. [55,2020]

3.3.72.3\* Container (Flammable or Combustible Liquid)

A vessel of 119 gal (450 L) or less capacity used for transporting or storing liquids, excluding intermediate bulk containers. [30,2021]

3.3.72.3.1 Closed Container

A container as herein defined, so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures. [30,2021]

3.3.72.4 Cryogenic Fluids Container

A cryogenic vessel used for transportation, handling, or storage

3.3.72.5 Intermediate Bulk Container

Any closed vessel having a liquid capacity not exceeding 3000 L (793 gal) and intended for storing and transporting liquids, as defined in Title 49, Code of Federal Regulations, Parts 100 through 199 or in Part 6 of the United Nations Recommendations on the Transport of Dangerous Goods. [30,2021]

3.3.72.6 [LP-Gas] Container

Any vessel, including cylinders, tanks, portable tanks, and cargo tanks, used for the transporting or storing of LP-Gases. [58,2020]

3.3.73 Control Area

See 3.3.14.2.

3.3.74\* Conventional Pallets

A material-handling aid designed to support a unit load with openings to provide access for material-handling devices. (See Figure A.3.3.74.) [13,2019]

3.3.75 Cooking Fire

The noncommercial, residential burning of materials not exceeding 3 ft (0.9 m) in diameter and 2 ft (0.6 m) in height, other than rubbish in which the fuel burned is contained in an outdoor fireplace, a barbecue grill, or a barbecue pit for the purpose of preparing food.

3.3.76 Cordwood

Logs 8 ft (2.4 m) or less in length customarily intended for pulpwood or fuel uses.

3.3.77 Core (Rolled Paper)

The central tube around which paper is wound to form a roll. [13,2019]

3.3.78 Corrosive Material

See 3.3.187.3.

3.3.79 Crude Petroleum

Hydrocarbon mixtures that have a flash point below 150°F (65.6°C) and that have not been processed in a refinery. [30,2021]

3.3.80 Cryogenic Fluid

A fluid with a boiling point lower than —130°F (—90°C) at an absolute pressure of 14.7 psi (101.3 kPa). [55,2020]

3.3.80.1 Flammable Cryogenic Fluid

A cryogenic fluid that forms flammable mixtures in air when in its vapor state. [55,2020]

3.3.80.2 Inert Cryogenic Fluid

A cryogenic fluid that vaporizes to produce an inert gas when in its vapor state. [55,2020]

3.3.80.3 Oxidizing Cryogenic Fluid

An oxidizing gas in the cryogenic state. [55,2020]

3.3.81\* Cultural Resource Properties

Buildings, structures, or sites, or portions thereof, that are culturally significant, or that house culturally significant collections for museums, libraries, and places of worship. [914,2019]

3.3.82 Cylinder

A pressure vessel designed for absolute pressures higher than 40 psi (276 kPa) and having a circular cross-section. It does not include a portable tank, multiunit tank car tank, cargo tank, or tank car. [55,2020]

3.3.83 Cylinder Containment Vessel

A gastight recovery vessel designed so that a leaking compressed gas container can be placed within its confines, thereby encapsulating the leaking container. [55,2020]

3.3.84\* Cylinder Pack

An arrangement of cylinders into a cluster where the cylinders are confined into a grouping or arrangement with a strapping or frame system and connections are made to a common manifold. The frame system is allowed to be on skids or wheels to permit movement. [55,2020]

3.3.85 Damage-Limiting Construction

For the purposes of this code, any set of construction elements, used individually or in combination, which will act to limit damage from an explosion, including open structures, pressure relieving construction, or pressure resistant construction. [30,2021]

3.3.86 Deficiency

For the purposes of inspection, testing, and maintenance of water-based fire protection systems, a condition that will or has the potential to adversely impact the performance of a system or portion thereof but does not rise to the level of an impairment. [25,2020]

3.3.86.1 Critical Deficiency

A deficiency that, if not corrected, can have a material effect on the ability of the fire protection system or unit to function as intended in a fire event. [25,2020]

3.3.86.2 Noncritical Deficiency

A deficiency that does not have a material effect on the ability of the fire protection system or unit to function in a fire event, but correction is needed to meet the requirements of this standard and NFPA 25 or for the proper inspection, testing, and maintenance of the system or unit. [25,2020]

3.3.87 Deflagration

Propagation of a combustion zone at a velocity that is less than the speed of sound in the unreacted medium. [68,2018]

3.3.88 Delivered Audio Quality (DAQ )

A measure of speech intelligibility over a transmission medium.

3.3.89 Desolventizing

The act of removing a solvent from a material.

3.3.90 Detector

A device suitable for connection to a circuit that has a sensor that responds to a physical stimulus such as gas, heat or smoke. [72,2019]

3.3.90.1 Air Sampling-Type Detector

A detector that consists of a piping or tubing distribution network that runs from the detector to the area(s) to be protected. An aspiration fan in the detector housing draws air from the protected area back to the detector through air-sampling ports, piping, or tubing. At the detector, the air is analyzed for fire products. [72,2019]

3.3.90.2 Automatic Fire Detector

A device designed to detect the presence of a fire signature and to initiate action. For the purpose of this Code, automatic fire detectors are classified as follows: Automatic Fire Extinguishing or Suppression System Operation Detector, Fire-Gas Detector, Heat Detector, Other Fire Detectors, Radiant Energy-Sensing Fire Detector, and Smoke Detector. [72,2019]

3.3.90.3 Automatic Fire Extinguishing or Suppression System Operation Detector

A device that automatically detects the operation of a fire extinguishing or suppression system by means appropriate to the system employed. [72,2019]

3.3.90.4\* Combination Detector

A device that either responds to more than one of the fire phenomena or employs more than one operating principle to sense one of these phenomena. Typical examples are a combination of a heat detector with a smoke detector or a combination rate-of-rise and fixed-temperature heat detector. This device has listings for each sensing method employed. [72,2019]

3.3.90.5 Electrical Conductivity Heat Detector

A line-type or spot-type sensing element in which resistance varies as a function of temperature. [72,2019]

3.3.90.6 Fire-Gas Detector

A device that detects gases produced by a fire. [72,2019]

3.3.90.7\* Fixed-Temperature Detector

A device that responds when its operating element becomes heated to a predetermined level. [72,2019]

3.3.90.8\* Flame Detector

A radiant energy-sensing fire detector that detects the radiant energy emitted by a flame. (Refer to A. 17.8.2 of NFPA 72.) [72,2019]

3.3.90.9 Gas Detector

A device that detects the presence of a specified gas concentration. Gas detectors can be either spot-type or line-type detectors. [72,2019]

3.3.90.10 Heat Detector

A fire detector that detects either abnormally high temperature or rate of temperature rise, or both. [72,2019]

3.3.90.11 Line-Type Detector

A device in which detection is continuous along a path. Typical examples are rate-of-rise pneumatic tubing detectors, projected beam smoke detectors, and heat-sensitive cable. [72,2019]

3.3.90.12\* Multi-Criteria Detector

A device that contains multiple sensors that separately respond to physical stimulus such as heat, smoke, or fire gases, or employs more than one sensor to sense the same stimulus. This sensor is capable of generating only one alarm signal from the sensors employed in the design either independently or in combination. The sensor output signal is mathematically evaluated to determine when an alarm signal is warranted. The evaluation can be performed either at the detector or at the control unit. This detector has a single listing that establishes the primary function of the detector. [72,2019]

3.3.90.13\* Multi-Sensor Detector

A device that contains multiple sensors that separately respond to physical stimulus such as heat, smoke, or fire gases, or employs more than one sensor to sense the same stimulus. A device capable of generating multiple alarm signals from any one of the sensors employed in the design, independently or in combination. The sensor output signals are mathematically evaluated to determine when an alarm signal is warranted. The evaluation can be performed either at the detector or at the control unit. This device has listings for each sensing method employed. [72,2019]

3.3.90.14 Other Fire Detectors

Devices that detect a phenomenon other than heat, smoke, flame, or gases produced by a fire. [72,2019]

3.3.90.15 Pneumatic Rate-of-Rise Tubing Heat Detector

A line-type detector comprising small-diameter tubing, usually copper, that is installed on the ceiling or high on the walls throughout the protected area. The tubing is terminated in a detector unit containing diaphragms and associated contacts set to actuate at a predetermined pressure. The system is sealed except for calibrated vents that compensate for normal changes in temperature. [72,2019]

3.3.90.16 Projected Beam-Type Detector

A type of photoelectric light obscuration smoke detector wherein the beam spans the protected area. [72,2019]

3.3.90.17 Radiant Energy-Sensing Fire Detector

A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics. [72,2019]

3.3.90.18\* Rate Compensation Detector

A device that responds when the temperature of the air surrounding the device reaches a predetermined level, regardless of the rate of temperature rise. [72,2019]

3.3.90.19\* Rate-of-Rise Detector

A device that responds when the temperature rises at a rate exceeding a predetermined value. [72,2019]

3.3.90.20 Smoke Detector

A device that detects visible or invisible particles of combustion. [72,2019]

3.3.90.21 Spark/Ember Detector

A radiant energy-sensing fire detector that is designed to detect sparks or embers, or both. These devices are normally intended to operate in dark environments and in the infrared part of the spectrum. [72,2019]

3.3.90.22 Spot-Type Detector

A device in which the detecting element is concentrated at a particular location. Typical examples are bimetallic detectors, fusible alloy detectors, certain pneumatic rate-of-rise detectors, certain smoke detectors, and thermoelectric detectors. [72,2019]

3.3.91 Detonation

Propagation of a combustion zone at a velocity greater than the speed of sound in the unreacted medium. [68,2018]

3.3.92 Dispensing

The pouring or transferring of a material from a container tank, or similar vessel whereby vapors, dusts, fumes, mists, or gases could be liberated to the atmosphere. [5000,2021]

3.3.93 Distillery

A plant or that portion of a plant where liquids produced by fermentation are concentrated and where the concentrated products are also mixed, stored, or packaged. [30,2021]

3.3.94 Distributor

A business engaged in the sale or resale, or both, of compressed gases or cryogenic fluids, or both. [55,2020]

3.3.95 Donor Antenna

Antennas used with in-building emergency responder communications enhancement systems that provide the connection between the wide-area communications system of interest and the in-building system.

3.3.96 Dormitory

See 3.3.199.9.

3.3.97 DOT

U.S. Department of Transportation.

3.3.98 Driveway

A clear space suitable for fire-fighting operations by motorized fire apparatus.

3.3.99\* Dwelling Unit

One or more rooms arranged for complete, independent housekeeping purposes, with space for eating, living, and sleeping; facilities for cooking; and provisions for sanitation. [5000,2021]

3.3.99.1 One- And Two-Family Dwelling Unit

See 3.3.199.25.1.

3.3.100 Emergency

A fire, explosion, or hazardous condition that poses an immediate threat to the safety of life or damage to property.

3.3.101 Emergency Relief Vent

An opening, construction method, or device that will automatically relieve excessive internal pressure due to an exposure fire. [30,2021]

3.3.102 Emergency Shutoff Valve

A designated valve designed to shut off the flow of gases or liquids. [55,2020]

3.3.103\* Energy Storage Systems (ESS)

One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time to the local power loads, to the utility grid, or for grid support. [855, 2020]

3.3.104 Ethylene Oxide Drum

For the purposes of this code, containers built to UN specification 1A1. [55,2020]

3.3.105 Excess Flow Control

A fail-safe system or approved means designed to shut off flow due to a rupture in pressurized piping systems. [55,2020]

3.3.106 Excess Flow Valve

A valve inserted into a compressed gas cylinder, portable tank, or stationary tank that is designed to positively shut off the flow of gas in the event that its predetermined flow is exceeded.

3.3.107\* Exhausted Enclosure

An appliance or piece of equipment that consists of a top, a back, and two sides that provides a means of local exhaust for capturing gases, fumes, vapors, and mists. [55,2020]

3.3.108\* Existing

That which is already in existence on the date this edition of the Code goes into effect. [101,2021]

3.3.109 Existing Condition

Any situation, circumstance, or physical makeup of any structure, premise, or process that was ongoing or in effect prior to the adoption of this Code.

3.3.110\* Exit

That portion of a means of egress that is separated from all other spaces of the building or structure by construction, location, or equipment as required to provide a protected way of travel to the exit discharge. [101,2021]

3.3.110.1\* Horizontal Exit

A way of passage from one building to an area of refuge in another building on approximately the same level, or a way of passage through or around a fire barrier to an area of refuge on approximately the same level in the same building that affords safety from fire and smoke originating from the area of incidence and areas communicating therewith. [101,2021]

3.3.111 Exit Access

That portion of a means of egress that leads to an exit. [101,2021]

3.3.112 Exit Discharge

That portion of a means of egress between the termination of an exit and a public way. [101,2021]

3.3.113 Explosion

The bursting or rupture of an enclosure or a container due to the development of internal pressure from a deflagration. [69,2019]

3.3.114\* Explosion Control

A means of either preventing an explosion through the use of explosion suppression, fuel reduction, or oxidant reduction systems or a means to prevent the structural collapse of a building in the event of an explosion through the use of deflagration venting, barricades, or related construction methods. [55,2020]

3.3.115\* Explosive Material

A chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. [5000,2021]

3.3.116 Extraction Room (Cannabis)

The room or space in which the solvent-based extraction process of cannabis occurs.

3.3.117 Facility

As applied to access and water supply, a structure or use in a fixed location including exterior storage, use, and handling areas that relates to the occupancies and operations covered by this Code.

3.3.117.1 Animal Housing Facility

Area of a building or structure, including interior and adjacent exterior spaces, where animals are fed, rested, worked, exercised, treated, exhibited, or used for production.

3.3.117.2 Hazardous Material Storage Facility

See 3.3.157.

3.3.117.3 Limited Care Facility

See 3.3.199.16.

3.3.117.4 Motor Fuel Dispensing Facility

See 3.3.199.22.

3.3.117.4.1 Fleet Vehicle Motor Fuel Dispensing Facility

See 3.3.199.22.1.

3.3.117.4.2 Marine Motor Fuel Dispensing Facility

See 3.3.199.22.2.

3.3.117.4.3 Motor Fuel Dispensing Facility Located Inside a Building

See 3.3.199.22.3.

3.3.118 Fail-Safe

A design arrangement incorporating one or more features that automatically counteracts the effect of an anticipated source of failure or which includes a design arrangement that eliminates or mitigates a hazardous condition by compensating automatically for a failure or malfunction.

3.3.119\* Festival Seating

A form of audience/spectator accommodation in which no seating, other than a floor or finished ground level, is provided for the audience/spectators gathered to observe a performance. [101,2021]

3.3.120 Fines (Wood)

Small pieces or splinters of wood byproducts that can pass through a 0.25 in. (6.4 mm) screen.

3.3.121 Finish

3.3.121.1 Interior Ceiling Finish

The interior finish of ceilings. [101,2021]

3.3.121.2\* Interior Finish

The exposed surfaces of walls, ceilings, and floors within buildings. [101,2021]

3.3.121.3\* Interior Floor Finish

The interior finish of floors, ramps, stair treads and risers, and other walking surfaces. [101,2021]

3.3.121.4\* Interior Wall Finish

The interior finish of columns, fixed or movable walls, and fixed or movable partitions. [101,2021]

3.3.122 Fires, Classification Of

3.3.122.1 Class A Fires

Class A fires are fires in ordinary combustible materials, such as wood, cloth, paper, rubber, and many plastics. [10, 2018]

3.3.122.2 Class B Fires

Class B fires are fires in flammable liquids, combustible liquids, petroleum greases, tars, oils, oil-based paints, solvents, lacquers, alcohols, and flammable gases. [10, 2018]

3.3.122.3 Class C Fires

Class C fires are fires that involve energized electrical equipment. [10, 2018]

3.3.122.4 Class D Fires

Class D fires are fires in combustible metals, such as magnesium, titanium, zirconium, sodium, lithium, and potassium. [10, 2018]

3.3.122.5 Class K Fires

Class K fires are fires in cooking appliances that involve combustible cooking media (vegetable or animal oils and fats). [10, 2018]

3.3.123 Fire, Recreational

See 3.3.235.

3.3.124 Fire Alarm System

See 3.3.278.10.

3.3.125 Fire Apparatus Access Road

The road or other means developed to allow access and operational setup for firefighting and rescue apparatus.

3.3.126 Fire Compartment

See 3.3.69.1.

3.3.127 Fire Door Assembly

Any combination of a fire door, a frame, hardware, and other accessories that together provide a specific degree of fire protection to the opening. [80,2019]

3.3.128 Fire Flow

The flow rate of a water supply, measured at 20 psi (137.9 kPa) residual pressure, that is available for fire fighting.

3.3.129 Fire Hazard

Any situation, process, material, or condition that, on the basis of applicable data, can cause a fire or explosion or that can provide a ready fuel supply to augment the spread or intensity of a fire or explosion, all of which pose a threat to life or property. [914,2019]

3.3.130\* Fire Hydrant

A valved connection on a water supply system having one or more outlets and that is used to supply hose and fire department pumpers with water. [1141, 2017]

3.3.131\* Fire Lane

A fire apparatus access road, which is marked with approved signs or other approved notices.

3.3.132 Fire Monitoring

Provisions implemented to provide early warning of smoldering fire conditions in the hot work area following completion of the established fire watch time period. [51B, 2019]

3.3.133 Fire Point

The lowest temperature at which a liquid will ignite and achieve sustained burning when exposed to a test flame in accordance with ASTM D92, Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester. [30,2021]

3.3.134 Fire Retardant

A liquid, solid, or gas that tends to inhibit combustion when applied on, mixed in, or combined with combustible materials.

3.3.135 Fire Watch

The assignment of a person or persons to an area for the express purpose of notifying the fire department, the building occupants, or both of an emergency; preventing a fire from occurring; extinguishing small fires; protecting the public from fire and life safety dangers.

3.3.136\* Fireworks

Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation, that meets the definition of Consumer Fireworks or Display Fireworks as set forth in NFPA 1124. [1124, 2017]

3.3.136.1\* Display Fireworks

Large fireworks devices that are explosive materials intended for use in fireworks displays and designed to produce visible or audible effects by combustion, deflagration, or detonation, as set forth in 27 CFR 555, 49 CFR 172, and APA 87-1, Standard for the Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics. [1124, 2017]

3.3.137\* Flame Spread

The propagation of flame over a surface. [101,2021]

3.3.138 Flame Spread Index

A comparative measure, expressed as a dimensionless number, derived from visual measurements of the spread of flame versus time for a material tested in accordance with ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials, or UL 723, Test for Surface Building Characteristics of Burning Materials. [101,2021]

3.3.139 Flammable Vapors

Flammable vapors are the concentration of flammable constituents in air that exceed 25 percent of their lower flammability limit (LFL).

3.3.140 Flash Point (FP)

The minimum temperature of a liquid at which sufficient vapor is given off to form an ignitible mixture with the air, near the surface of the liquid or within the vessel used, as determined by the appropriate test procedure and apparatus specified in Section 4.4 of NFPA 30. [30,2021]

3.3.141 Floor Area

Upcodes Diagrams

3.3.141.1\* Gross Floor Area

The floor area within the inside perimeter of the outside walls, or the outside walls and fire walls of a building, or outside and/or inside walls that bound an occupancy or incidental use area with no deduction for hallways, stairs, closets, thickness of interior walls, columns, elevator and building services shafts, or other features, but excluding floor openings associated with atriums and communicating spaces. [5000,2021]

Upcodes Diagrams

3.3.141.2 Net Floor Area

The floor area within the inside perimeter of the outside walls, or the outside walls and fire walls of a building, or outside and/or inside walls that bound an occupancy or incidental use area with deductions for hallways, stairs, closets, shafts, thickness of interior walls, columns, and other features. [5000,2021]

Upcodes Diagrams

3.3.142 Forecasting

The ability to predict fire progression in a scrap tire storage location prior to the completion of the inventory fire break using heavy equipment.

3.3.143\* Fugitive Emissions

Releases of flammable vapor that continuously or intermittently occur from process equipment during normal operations. [30,2021]

3.3.144 Gallon, U.S. Standard

1 U.S. gal = 0.833 Imperial gal = 231 in.3 = 3.785 L. [58,2020]

3.3.145 Garage

A building or portion of a building in which one or more self-propelled vehicles carrying volatile flammable liquid for fuel or power are kept for use, sale, storage, rental, repair, exhibition, or demonstrating purposes, and all that portion of a building that is on or below the floor or floors in which such vehicles are kept and that is not separated therefrom by suitable cutoffs. [5000,2021]

3.3.146 Gas

3.3.146.1\* Compressed Gas

A material, or mixture of materials, that (1) is a gas at 68°F (20°C) or less at an absolute pressure of 14.7 psi (101.3 kPa) and (2) has a boiling point of 68°F (20°C) or less at an absolute pressure of 14.7 psi (101.3 kPa) and that is liquefied, nonliquefied, or in solution, except those gases that have no other health or physical hazard properties are not considered to be compressed until the pressure in the packaging exceeds an absolute pressure of 40.6 psi (280 kPa) at 68°F (20°C). [55,2020]

3.3.146.1.1 Compressed Gas Mixtures

A mixture of two or more compressed gases contained in a packaging, the hazard properties of which are represented by the properties of the mixture as a whole.

3.3.146.1.2 Compressed Gases in Solution

Nonliquefied gases that are dissolved in a solvent.

3.3.146.1.3 Liquefied Compressed Gases

Gases that are contained in a packaging under the charged pressure and are partially liquid at a temperature of 68°F (20°C).

3.3.146.1.4 Nonliquefied Compressed Gases

Gases, other than those in solution, that are contained in a packaging under the charged pressure and are entirely gaseous at a temperature of 68°F (20°C).

3.3.146.2 Corrosive Gas

A gas that causes visible destruction of or irreversible alterations in living tissue by chemical action at the site of contact. [55,2020]

3.3.146.3 Flammable Gas

A material that is a gas at 68°F (20°C) or less at an absolute pressure of 14.7 psi (101.3 kPa), that is ignitable at an absolute pressure of 14.7 psi (101.3 kPa) when in a mixture of 13 percent or less by volume with air, or that has a flammable range at an absolute pressure of 14.7 psi (101.3 kPa) with air of at least 12 percent, regardless of the lower limit. [55,2020]

3.3.146.4 Flammable Liquefied Gas

A liquefied compressed gas that, when under a charged pressure, is partially liquid at a temperature of 68°F (20°C) and is flammable. [55,2020]

3.3.146.5 Highly Toxic Gas

A chemical that has a median lethal concentration (LC50) in air of 200 ppm by volume or less of gas or vapor, or 2 mg/L or less of mist, fume, or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 0.44 lb and 0.66 lb (200 g and 300 g) each. [55,2020]

3.3.146.6\* Inert Gas

A nonreactive, nonflammable, noncorrosive gas such as argon, helium, krypton, neon, nitrogen, and xenon. [55,2020]

3.3.146.7 Liquefied Gas

A gas, other than in solution, that in a packaging under the charged pressure exists both as a liquid and a gas at a temperature of 68°F (20°C). [30,2021]

3.3.146.8 Liquefied Natural Gas (LNG)

A fluid in the cryogenic liquid state that is composed predominantly of methane and that can contain minor quantities of ethane, propane, nitrogen, and other components normally found in natural gas. [59A,2019]

3.3.146.9\* Liquefied Petroleum Gas (LP-Gas)

Any material having a vapor pressure not exceeding that allowed for commercial propane that is composed predominantly of the following hydrocarbons, either by themselves (except propylene) or as mixtures: propane, propylene, butane (normal butane or isobutane), and butylenes. [58,2020]

3.3.146.10 Nonflammable Gas

A gas that does not meet the definition of a flammable gas. [55,2020]

3.3.146.11\* Other Gas

A gas that is not a corrosive gas, flammable gas, highly toxic gas, oxidizing gas, pyrophoric gas, toxic gas, or unstable reactive gas with a hazard rating of Class 2, Class 3, or Class 4 gas. [55,2020]

3.3.146.12 Oxidizing Gas

A gas that can support and accelerate combustion of other materials more than air does. [55:2020]

3.3.146.13 Pyrophoric Gas

A gas with an autoignition temperature in air at or below 130°F (54.4°C). [55,2020]

3.3.146.14 Scavenged Gas

A residual process gas that is collected for treatment or release at a location remote from the site of use.

3.3.146.15 Simple Asphyxiant Gas

A gas that does not provide sufficient oxygen to support life and that has none of the other physical or health hazards.

3.3.146.16 Toxic Gas

A gas with a median lethal concentration (LC50) in air of more than 200 ppm but not more than 2000 ppm by volume of gas or vapor, or more than 2 mg/L but not more than 20 mg/L of mist, fume, or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 0.44 lb and 0.66 lb (200 g and 300 g) each. [55,2020]

3.3.146.17\* Unstable Reactive Gas

A gas that, in the pure state or as commercially produced, will vigorously polymerize, decompose, or condense; become self-reactive; or otherwise undergo a violent chemical change under conditions of shock, pressure, or temperature. [55,2020]

3.3.147\* Gas Cabinet

A fully enclosed, noncombustible enclosure used to provide an isolated environment for compressed gas cylinders in storage or use. [55,2020]

3.3.148 Gas Manufacturer/Producer

A business that produces compressed gases or cryogenic fluids, or both, or fills portable or stationary gas cylinders, containers, or tanks. [55:2020]

3.3.149 Gas Room

A separately ventilated, fully enclosed room in which only compressed gases, cryogenic fluids, associated equipment, and supplies are stored or used. [55,2020]

3.3.150\* Gaseous Hydrogen (GH2) System

An assembly of equipment that consists of, but is not limited to, storage containers, pressure regulators, pressure relief devices, compressors, manifolds, and piping and that terminates at the source valve. [55,2020]

3.3.151\* Grade Plane

A reference plane upon which vertical measurements of a building are based representing the average of the finished ground level adjoining the building at all exterior walls. [5000, 2021]

3.3.152 Ground Kettle

A container that could be mounted on wheels and is used for heating tar, asphalt, or similar substances.

3.3.153 Handling

The deliberate movement of material by any means to a point of storage or use.

3.3.154\* Hazard of Contents

3.3.154.1 High Hazard

High hazard contents shall include materials defined as hazardous materials in 3.3.187.4, whether stored, used, or handled. [5000:6.3.2.4.1.1]

3.3.154.1.1 High Hazard Level 1 Contents

High hazard Level 1 contents shall include materials that present a detonation hazard including, but not limited to, the following: (1) Explosives; (2) Unclassified detonable organic peroxides; (3) Class 4 oxidizers; (4) Detonable pyrophoric materials; (5) Class 3 detonable and Class 4 unstable (reactive) materials. [5000:6.3.2.4.2]

3.3.154.1.2 High Hazard Level 2 Contents

High hazard Level 2 contents shall include materials that present a deflagration hazard or a hazard from accelerated burning including, but not limited to, the following: (1) Class I, Class II, or Class III-A flammable or combustible liquids that are used or stored in normally open containers or systems, or in closed containers or systems at gauge pressures of more than 15 psi (103 kPa); (2) Combustible dusts stored, used, or generated in a manner creating a severe fire or explosion hazard; (3) Flammable gases and flammable cryogenic liquids; (4) Class I organic peroxides; (5) Class 3 solid or liquid oxidizers that are used or stored in normally open containers or systems, or in closed containers or systems at gauge pressures of more than 15 psi (103 kPa); (6) Nondetonable pyrophoric materials; (7) Class 3 nondetonable unstable (reactive) materials; (8) Class 3 water-reactive materials. [5000:6.3.2.4.3]

3.3.154.1.3 High Hazard Level 3 Contents

High hazard Level 3 contents shall include materials that readily support combustion or present a physical hazard including, but not limited to, the following: (1) Level 2 and Level 3 aerosols; (2) Class I, Class II, or Class III-A flammable or combustible liquids that are used or stored in normally closed containers or systems at gauge pressures of less than 15 psi (103 kPa); (3) Flammable solids, other than dusts classified as high hazard Level 2, stored, used, or generated in a manner creating a high fire hazard; (4) Class II and Class III organic peroxides; (5) Class 2 solid or liquid oxidizers; (6) Class 3 solid or liquid oxidizers that are used or stored in normally closed containers or systems at gauge pressures of less than 15 psi (103 kPa); (7) Oxidizing gases and oxidizing cryogenic liquids; (8) Class 2 unstable (reactive) materials; (9) Class 2 water-reactive materials. [5000:6.3.2.4.4]

3.3.154.1.4 High Hazard Level 4 Contents

High hazard Level 4 contents shall include materials that are acute health hazards including, but not limited to, the following: (1) Corrosives; (2) Highly toxic materials; (3) Toxic materials. [5000:6.3.2.4.5]

3.3.154.1.5 High Hazard Level 5 Contents

High hazard Level 5 contents shall include hazardous production materials (HPM) used in the fabrication of semiconductors or semiconductor research and development. [5000:6.3.2.4.6]

3.3.154.2\* Low Hazard Contents

Low hazard contents shall be classified as those of such low combustibility that no self-propagating fire therein can occur. [5000:6.3.2.2]

3.3.154.3\* Ordinary Hazard Contents

Ordinary hazard contents shall be classified as those that are likely to burn with moderate rapidity or to give off a considerable volume of smoke. [5000:6.3.2.3]

3.3.155\* Hazard Rating

The numerical rating of the health, flammability, self-reactivity, and other hazards of the material, including its reaction with water. [55,2020]

3.3.156 Hazardous Material

See 3.3.187.4.

3.3.157 Hazardous Material Storage Facility

A building, a portion of a building, or exterior area used for the storage of hazardous materials in excess of exempt amounts.

3.3.158 Hazardous Materials Storage Locker

A movable prefabricated structure, manufactured primarily at a site other than the final location of the structure and transported completely assembled or in a ready-to-assemble package to the final location, and intended to meet local, state, and federal requirements for outside storage of hazardous materials. [30,2021]

3.3.159\* Hazardous Reaction or Hazardous Chemical Reaction

Reactions that result in dangers beyond the fire problems relating to flash point and boiling point of either the reactants or of the products. [30,2021]

3.3.160 Heat Transfer Fluid (HTF)

A liquid that is used as a medium to transfer heat energy from a heater or vaporizer to a remote heat consumer (e.g., injection molding machine, oven, or dryer, or jacketed chemical reactor). [30,2021]

3.3.161\* Heliport

An identifiable area located on land, on water, or on a structure, that also includes any existing buildings or facilities thereon, used or intended to be used for landing and takeoff of helicopters. [418, 2016]

3.3.162 Hogged Material

Mill waste consisting mainly of hogged bark but possibly including a mixture of bark, chips, dust, or other by-products from trees; also includes material designated as hogged fuel.

3.3.163 Home

3.3.163.1 Day-Care Home

See 3.3.199.6.

3.3.163.2 Nursing Home

See 3.3.199.24.

3.3.164 Horizontal Exit

See 3.3.110.1.

3.3.165\* Immediately Dangerous to Life and Health (IDLH)

A concentration of airborne contaminants, normally expressed in parts per million (ppm) or milligrams per cubic meter, that represents the maximum level from which one could escape within 30 minutes without any escape-impairing symptoms or irreversible health effects. [55,2020]

3.3.166\* Imminent Danger

A condition, use, or practice in an occupancy or structure that poses a hazard that could reasonably be expected to cause death, serious physical harm, or serious property loss.

3.3.167 In-Building Emergency Responder Communications Enhancement System

A combination of components, RF-emitting devices, antennas, cables, power supplies, control circuitry, and programming installed at a specific location to improve wireless communication at that location.

3.3.168\* Incident Commander (IC)

The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. [472, 2018]

3.3.169 Incidental Liquid Use or Storage

Use or storage as a subordinate activity to that which establishes the occupancy or area classification. [30,2021]

3.3.170 Indicating Valve

See 3.3.295.1.

3.3.171 Indoor Horticultural Grow Structure

An enclosed structure installed within buildings that creates a controlled environment for enhanced horticultural growing conditions using an artificial light source.

3.3.172 Initiating Device Circuit

A circuit to which automatic or manual initiating devices are connected where the signal received does not identify the individual device operated. [72, 2016]

3.3.173 Inside Liquid Storage Area

See 3.3.14.6.

3.3.174\* ISO Module

An assembly of tanks or tubular cylinders permanently mounted in a frame conforming to International Organization for Standardization (ISO) requirements. [55,2020]

3.3.175 Jurisdiction

A governmental unit or political division or a subdivision.

3.3.176 Limit

3.3.176.1\* Ceiling Limit

The maximum concentration of an airborne contaminant to which one can be exposed. [5000,2021]

3.3.176.2\* Permissible Exposure Limit (PEL)

The maximum permitted 8-hour, time-weighted average concentration of an airborne contaminant. [55,2020]

3.3.176.3\* Short-Term Exposure Limit (STEL)

The concentration to which it is believed that workers can be exposed continuously for a short period of time without suffering from irritation, chronic or irreversible tissue damage, or narcosis of a degree sufficient to increase the likelihood of accidental injury, impairment of self-rescue, or the material reduction of work efficiency, without exceeding the daily permissible exposure limit (PEL). [55,2020]

3.3.177 Limited-Combustible (Material)

See 4.5.10. [5000,2021]

3.3.178 Liquid

A material that has a melting point that is equal to or less than 68°F (20°C) at a boiling point that is greater than 68°F (20°C) and 14.7 psia (101.3 kPa). When not otherwise identified, the term liquid shall mean both flammable and combustible liquids. [5000,2021]

3.3.178.1 Combustible Liquid

An ignitible liquid that is classified as a Class II or Class III liquid. (See 66.4.1.2 and 66.4.1.3.) [30,2021]

3.3.178.2 Flammable Liquid

An ignitible liquid that is classified as a Class I liquid. (See 66.4.1.1.) [30,2021]

3.3.178.3 Highly Volatile Liquid

A liquid with a boiling point of less than 68°F (20°C).

3.3.178.4\* Ignitible Liquid

Any liquid or liquid mixture that has a measurable closed-cup flash point. [30, 2021]

3.3.178.5 Liquid Class

A uniform system of classifying ignitible liquids. (See 66.4 and Chapter 4 of NFPA 30.)

3.3.178.6 Stable Liquid

Any liquid not defined as unstable. [30,2021]

3.3.179 Log

Felled tree from which all the branches have been removed.

3.3.180 Loose House

A separate detached building in which unbaled combustible fibers are stored.

3.3.181 Lumber

Wood from felled trees having a section produced by lengthwise sawing or chipping of logs or other solid wood of large dimensions and possible crosscutting and/or further machining to obtain a certain size and includes boards, dimension lumber, timber, and similar wood products.

3.3.182 Manual Emergency Shutoff Valve

A designated valve designed to shut off the flow of gases or liquids that is manually operated. [55,2020]

3.3.183 Manual Fire Alarm Box

A manually operated device used to initiate a fire alarm signal. [72, 2016]

3.3.184 Manual Pull Station

See 3.3.183, Manual Fire Alarm Box.

3.3.185 Marine Terminal

A facility comprised of one or more berths, piers, wharves, loading and unloading areas, warehouses, and storage yards and used for transfer of people and/or cargo between waterborne and land transportation modes. [307,2021]

3.3.186 Marine Vessel

A water craft or other artificial contrivance used as a means of transportation in or on the water.

3.3.187 Material

3.3.187.1 Combustible (Material)

See 3.3.59.

3.3.187.2 Compatible Material

A material that, when in contact with an oxidizer, will not react with the oxidizer or promote or initiate its decomposition.

3.3.187.3\* Corrosive Material

A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. [400,2019]

3.3.187.4\* Hazardous Material

A chemical or substance that is classified as a physical hazard material or a health hazard material, whether the chemical or substance is in usable or waste condition. (See also 3.3.187.6, Health Hazard Material, and 3.3.187.12, Physical Hazard Material.)[400,2019]

3.3.187.5 Hazardous Production Material (HPM)

A solid, liquid, or gas associated with semiconductor manufacturing that has a degree-of-hazard rating of 3 or 4 in health, flammability, instability, or water reactivity in accordance with NFPA 704 and that is used directly in research, laboratory, or production processes that have as their end product materials that are not hazardous. [5000,2021]

3.3.187.6 Health Hazard Material

A chemical or substance classified as a toxic, highly toxic, or corrosive material in accordance with definitions set forth in this Code. [400,2019]

3.3.187.7\* Highly Toxic Material

A material that produces a lethal dose or lethal concentration that falls within any of following categories: (1) a chemical that has a median lethal dose (LD50) of 50 mg/kg or less of body weight when administered orally to albino rats weighing between 200 g and 300 g each; (2) a chemical that has a median lethal dose (LD50) of 200 mg/kg or less of body weight when administered by continuous contact for 24 hours, or less if death occurs within 24 hours, with the bare skin of albino rabbits weighing between 2 kg and 3 kg each or albino rats weighing 200 g to 300 g each; (3) a chemical that has a median lethal concentration (LC50) in air of 200 parts per million by volume or less of gas or vapor, or 2 mg/L or less of mist, fume, or dust, when administered by continuous inhalation for 1 hour, or less if death occurs within 1 hour, to albino rats weighing between 200 g and 300 g each. [400,2019]

3.3.187.8 Hogged Material

See 3.3.162.

3.3.187.9\* Incompatible Material

Materials that, when in contact with each other, have the potential to react in a manner that generates heat, fumes, gases or by-products that are hazardous to life or property. [400,2019]

3.3.187.10 Limited-Combustible (Material)

See 4.5.10. [5000,2021]

3.3.187.11 Noncombustible Material

See 4.5.9. [5000,2021]

3.3.187.12 Physical Hazard Material

A chemical or substance classified as a combustible liquid, explosive, flammable cryogen, flammable gas, flammable liquid, flammable solid, organic peroxide, oxidizer, oxidizing cryogen, pyrophoric, unstable (reactive), or water-reactive material. [400,2019]

3.3.187.13 Pyrophoric Material

A chemical with an autoignition temperature in air at or below 130°F (54.4°C). [400,2019]

3.3.187.14\* Toxic Material

A material that produces a lethal dose or a lethal concentration within any of the following categories: (1) a chemical or substance that has a median lethal dose (LD50) of more than 50 mg/kg but not more than 500 mg/kg of body weight when administered orally to albino rats weighing between 200 g and 300 g each; (2) a chemical or substance that has a median lethal dose (LD50) of more than 200 mg/kg but not more than 1000 mg/kg of body weight when administered by continuous contact for 24 hours, or less if death occurs within 24 hours, with the bare skin of albino rabbits weighing between 2 kg and 3 kg each; (3) a chemical or substance that has a median lethal concentration (LC50) in air of more than 200 parts per million but not more than 2000 parts per million by volume of gas or vapor, or more than 2 mg/L but not more than 20 mg/L, of mist, fume, or dust when administered by continuous inhalation for 1 hour, or less if death occurs within 1 hour, to albino rats weighing between 200 g and 300 g each. [400,2019]

3.3.187.15\* Unstable (Reactive) Material

A material that, in the pure state or as commercially produced, will vigorously polymerize, decompose or condense, become self-reactive, or otherwise undergo a violent chemical change under conditions of shock, pressure, or temperature. [400,2019]

3.3.187.16\* Water-Reactive Material

A material that explodes, violently reacts, produces flammable, toxic, or other hazardous gases; or evolves enough heat to cause self-ignition or ignition of nearby combustibles upon exposure to water or moisture. [400,2019]

3.3.188\* Maximum Allowable Quantity (MAQ)

The quantity of hazardous material permitted in a control area.

3.3.189\* Means of Egress

Diagram

A continuous and unobstructed way of travel from any point in a building or structure to a public way consisting of three separate and distinct parts: (1) the exit access, (2) the exit, and (3) the exit discharge. [101,2021]

UpCodes Diagrams

P

Means of Egress Components

3.3.190 Means of Escape

A way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out. [101,2021]

3.3.191 Mezzanine

An intermediate level between the floor and the ceiling of any room or space. [101,2021]

3.3.192 Miscella

A mixture, in any proportion, of the extracted oil or fat and the extracting solvent.

3.3.193\* Mobile Supply Unit

Any supply source that is equipped with wheels so it is able to be moved around. [55,2020]

3.3.194\* Mobile or Temporary Cooking

Any cooking apparatus or equipment operated on a one-time basis, interim basis, or for less than 90 days in the same location, other than at a fixed location, building, or structure that has been inspected and permitted under another section of this Code, regulation, or statute.

3.3.195 Motor Vehicle Fluid

A fluid that is a flammable, combustible, or hazardous material, such as crankcase fluids, fuel, brake fluids, transmission fluids, radiator fluids, and gear oil.

3.3.196 Nesting

A method of securing cylinders upright in a tight mass using a contiguous three-point contact system whereby all cylinders in a group have a minimum of three contact points with other cylinders or a solid support structure (e.g., a wall or railing). [55,2020]

3.3.197\* Normal Temperature and Pressure (NTP)

A temperature of 70°F (21°C) at an absolute pressure of 14.7 psi (101.3 kPa). [55,2020]

3.3.198 Observation

For the purposes of cannabis extraction equipment field verification, a practice or condition not technically noncompliant with other regulations or requirements, but could lead to noncompliance if left unaddressed.

3.3.199 Occupancy

The purpose for which a building or other structure, or part thereof, is used or intended to be used. [ASCE/SEI 7:1.2]

Upcodes Diagrams

3.3.199.1\* Ambulatory Health Care Occupancy

An occupancy used to provide services or treatment simultaneously to four or more patients that provides, on an outpatient basis, one or more of the following: (1) treatment for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others; (2) anesthesia that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others; (3) treatment for patients who, due to the nature of their injury or illness, are incapable of taking action for self-preservation under emergency conditions without the assistance of others. [101,2021]

3.3.199.2\* Apartment Building

A building or portion thereof containing three or more dwelling units with independent cooking and bathroom facilities. [101,2021]

3.3.199.3\* Assembly Occupancy

An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load. [101,2021]

3.3.199.4 Bulk Merchandising Retail Building

A building in which the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 12 ft (3660 mm) in storage height. [101,2021]

3.3.199.5\* Business Occupancy

An occupancy used for the transaction of business other than mercantile. [101,2021]

3.3.199.6\* Day-Care Home

A building or portion of a building in which more than 3 but not more than 12 clients receive care, maintenance, and supervision, by other than their relative(s) or legal guardian(s), for less than 24 hours per day. [101,2021]

3.3.199.7\* Day-Care Occupancy

An occupancy in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than 24 hours per day. [101,2021]

3.3.199.8\* Detention and Correctional Occupancy

An occupancy, other than one whose primary intended use is health care, ambulatory health care, or residential board and care, used to lawfully incarcerate or lawfully detain one or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control. [101,2021]

3.3.199.8.1 Detention and Correctional Use Condition

For application of the life safety requirements in Section 20.7, the resident user category is divided into the five use conditions.

3.3.199.8.1.1 Use Condition I — Free Egress

A condition under which free movement is allowed from sleeping areas and other spaces where access or occupancy is permitted to the exterior via means of egress that meet the requirements of NFPA 101. [101:22.1.2.1.1]

3.3.199.8.1.2 Use Condition II — Zoned Egress

A condition under which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. [101:22.1.2.1.2]

3.3.199.8.1.3 Use Condition III — Zoned Impeded Egress

A condition under which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping rooms and a group activity space, with egress impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment. [101:22.1.2.1.3]

3.3.199.8.1.4 Use Condition IV — Impeded Egress

A condition under which free movement is restricted from an occupied space, and remote-controlled release is provided to allow movement from all sleeping rooms, activity spaces, and other occupied areas within the smoke compartment to another smoke compartment. [101:22.1.2.1.4]

3.3.199.8.1.5 Use Condition V — Contained

A condition under which free movement is restricted from an occupied space, and staff-controlled manual release at each door is provided to allow movement from all sleeping rooms, activity spaces, and other occupied areas within the smoke compartment to another smoke compartment. [101:22.1.2.1.5]

3.3.199.9\* Dormitory

A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities. [101,2021]

3.3.199.10\* Educational Occupancy

An occupancy used for educational purposes through the twelfth grade by six or more persons for 4 or more hours per day or more than 12 hours per week. [101,2021]

3.3.199.11\* Health Care Occupancy

An occupancy used to provide medical or other treatment or care simultaneously to four or more patients on an inpatient basis, where such patients are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control. [101,2021]

3.3.199.12\* High-Risk Occupancy

An occupancy that has a history of high frequency of fires, high potential for loss of life or economic loss, or that has a low or moderate history of fires or loss of life but the occupants have a high dependency on the built-in fire protection features or staff to assist in evacuation during a fire or other emergency. [1730,2019]

3.3.199.13 Hospital

A building or portion thereof used on a 24-hour basis for the medical, psychiatric, obstetrical, or surgical care of four or more inpatients. [101,2021]

3.3.199.14\* Hotel

A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals. [101,2021]

3.3.199.15\* Industrial Occupancy

An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted. [101,2021]

3.3.199.16\* Limited Care Facility

A building or portion of a building used on a 24-hour basis for the housing of four or more persons who are incapable of self-preservation because of age; physical limitations due to accident or illness; or limitations such as intellectual disability/developmental disability, mental illness, or chemical dependency. [101,2021]

3.3.199.17 Lodging or Rooming House

A building or portion thereof that does not qualify as a one- or two-family dwelling, that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants. [101,2021]

3.3.199.18\* Low-Risk Occupancy

An occupancy that has a history of low frequency of fires and minimal potential for loss of life or economic loss. [1730,2019]

3.3.199.19\* Mercantile Occupancy

An occupancy used for the display and sale of merchandise. [101,2021]

3.3.199.19.1 Class A Mercantile Occupancy

All mercantile occupancies having an aggregate gross area of more than 30,000 ft2 (2800 m2) or occupying more than three stories for sales purposes. [101,2021]

3.3.199.19.2 Class B Mercantile Occupancy

All mercantile occupancies of more than 3000 ft2 (280 m2), but not more than 30,000 ft2 (2800 m2), aggregate gross area and occupying not more than three stories for sales purposes. Class B also includes all mercantile occupancies of not more than 3000 ft2 (280 m2) gross area and occupying two or three stories for sales purposes. [101,2021]

3.3.199.19.3 Class C Mercantile Occupancy

All mercantile occupancies of not more than 3000 ft2 (280 m2) gross area and used for sales purposes occupying one story only, excluding mezzanines. [101,2021]

3.3.199.20 Mixed Occupancy

A multiple occupancy where the occupancies are intermingled. [101,2021]

3.3.199.21\* Moderate-Risk Occupancy

An occupancy that has a history of moderate frequency of fires or a moderate potential for loss of life or economic loss. [1730,2019]

3.3.199.22 Motor Fuel Dispensing Facility

That portion of a property where motor fuels are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles or marine craft or into approved containers, including all equipment used in connection therewith. [30A,2021]

3.3.199.22.1 Fleet Vehicle Motor Fuel Dispensing Facility

A motor fuel dispensing facility at a commercial, industrial, governmental, or manufacturing property where motor fuels are dispensed into the fuel tanks of motor vehicles that are used in connection with the business or operation of that property by persons within the employ of such business or operation. [30A,2021]

3.3.199.22.2 Marine Motor Fuel Dispensing Facility

A motor fuel dispensing facility at or adjacent to shore, a pier, a wharf, or a floating dock where motor fuels are dispensed into the fuel tanks of marine craft. [30A,2021]

3.3.199.22.3\* Motor Fuel Dispensing Facility Located Inside a Building

That portion of a motor fuel dispensing facility located within the perimeter of a building or building structure that also contains other occupancies. [30A,2021]

3.3.199.23 Multiple Occupancy

A building or structure in which two or more classes of occupancy exist. [101,2021]

3.3.199.24 Nursing Home

A building or portion of a building used on a 24-hour basis for the housing and nursing care of four or more persons who, because of mental or physical incapacity, might be unable to provide for their own needs and safety without the assistance of another person. [101,2021]

3.3.199.25 One- And Two-Family Dwelling

One- and two-family dwellings include buildings containing not more than two dwelling units in which each dwelling unit is occupied by members of a single family with not more than three outsiders, if any, accommodated in rented rooms.

3.3.199.25.1 One- And Two-Family Dwelling Unit

A building that contains not more than two dwelling units, each dwelling unit occupied by members of a single family with not more than three outsiders, if any, accommodated in rented rooms. [101,2021]

3.3.199.26\* Parking Structure

A building, structure, or portion thereof used for the parking, storage, or both, of motor vehicles. [88A,2019]

3.3.199.26.1 Basement and Underground Parking Structures

Parking structures that are located below grade. A basement parking structure has other occupancies above it and an underground parking structure has no occupancy other than parking above it. Basement and underground parking structures are considered as specific cases of enclosed parking structures.

3.3.199.26.2 Enclosed Parking Structure

Any parking structure that is not an open parking structure. [88A,2019]

3.3.199.26.3 Open Parking Structure

A parking structure that meets the requirements of Section 5.5 of NFPA 88A. [88A,2019]

3.3.199.27 Repair Garages

3.3.199.27.1 Major Repair Garage

A building or portions of a building where major repairs, such as engine overhauls, painting, body and fender work, and repairs that require draining of the motor vehicle fuel tank are performed on motor vehicles, including associated floor space used for offices, parking, or showrooms.

3.3.199.27.2 Minor Repair Garage

A building or portions of a building used for lubrication, inspection, and minor automotive maintenance work, such as engine tune-ups, replacement of parts, fluid changes (e.g., oil, antifreeze, transmission fluid, brake fluid, air conditioning refrigerants, etc.), brake system repairs, tire rotation, and similar routine maintenance work, including associated floor space used for offices, parking, or showrooms.

3.3.199.28\* Residential Board and Care Occupancy

An occupancy used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services. [101,2021]

3.3.199.29\* Residential Occupancy

An occupancy that provides sleeping accommodations for purposes other than health care or detention and correctional. [101,2021]

3.3.199.30 Separated Occupancy

A multiple occupancy where the occupancies are separated by fire resistance-rated assemblies. [101,2021]

3.3.199.31\* Storage Occupancy

An occupancy used primarily for the storage or sheltering of goods, merchandise, products, or vehicles. [101,2021]

3.3.199.31.1\* Mini-Storage Building

A storage occupancy partitioned into individual storage units that are rented or leased for the purposes of storing personal or business items where a majority of the individual storage units are not greater than 750 ft2 (70 m2). [5000, 2021]

3.3.200 Occupant Load

The total number of persons that might occupy a building or portion thereof at any one time. [101,2021]

3.3.201 Open System Use

See 3.3.293.2.

3.3.202 Operating Pressure

The pressure at which a system operates.

3.3.203\* Operating Unit (Vessel) or Process Unit (Vessel)

The equipment in which a unit operation or unit process is conducted. (See also 3.3.289, Unit Operation or Unit Process.) [30,2021]

3.3.204 Operations

A general term that includes, but is not limited to, the use, transfer, storage, and processing of liquids. [30,2021]

3.3.205 Organic Peroxide

Any organic compound having a double oxygen or peroxy (-O-O-) group in its chemical structure. [400,2019]

3.3.205.1 Organic Peroxide Formulation

A pure or technically pure organic peroxide or a mixture of organic peroxides with an active oxygen (aO) concentration greater than 1 percent alone or in combination with one or more materials. The transport type for organic peroxide formulations is determined by the UN Manual of Tests and Criteria, Part II. Terms such as accelerator, catalyst, initiator, and curing agent are sometimes used to describe organic peroxide formulations and are misleading because they can also refer to materials that are not or do not contain organic peroxides, some of which might present increased hazard when mixed with organic peroxides. [400,2019]

3.3.205.1.1 Class I Organic Peroxide

Describes organic peroxide formulations that are more severe than a Class II but do not detonate and that are characterized as "explosive in package" or by a very fast burning rate. Includes those characterized for transport as Type B, those characterized for transport as Type C with a large-scale burning rate equal to or greater than 300 kg/min, and those characterized for transport as Type C with a small-scale burning rate greater than 9.0 kg/min x m2 unless the large-scale burning rate is less than 300 kg/min. [400,2019]

3.3.205.1.2 Class II Organic Peroxide

3.3.205.1.2.1 Class IIA Organic Peroxide

Describes organic peroxide formulations characterized for transport as Type C with a large-scale burning rate greater than 140 kg/min but less than 300 kg/min. Includes those characterized as Type C, Type D, and Type E if the small-scale burning rate is greater than 2.2 kg/min x m2. [400, 2019]

3.3.205.1.2.2 Class IIB Organic Peroxide

Describes organic peroxide formulations characterized for transport as Type C with a large-scale burning rate of greater than 60 kg/min but less than 140 kg/min. Includes those characterized for transport as Type D with a large-scale burning rate greater than 60 kg/min, those characterized for transport as Type E with a large-scale burning rate greater than 60 kg/min, and those characterized as Type C, Type D, and Type E if the small-scale burning rate is greater than 0.9 kg/min x m2. [400, 2019]

3.3.205.1.3 Class III Organic Peroxide

Describes organic peroxide formulations that burn rapidly and present a moderate reactivity hazard. Includes those characterized for transport as Type D with a large-scale burning rate equal to or greater than 10 kg/min but less than 60 kg/min, those characterized for transport as Type E with a large-scale burning rate equal to or greater than 10 kg/min but less than 60 kg/min, those characterized for transport as Type F with a large-scale burning rate equal to or greater than 10 kg/min, and those characterized as Type D, Type E, and Type F if the small-scale burning rate is less than 0.9 kg/min x m2. [400,2019]

3.3.205.1.4 Class IV Organic Peroxide

Describes organic peroxide formulations that burn in the same manner as ordinary combustibles and present a minimal reactivity hazard. Includes those characterized for transport as Type E or Type F with a large-scale burning rate less than 10 kg/ min. [400,2019]

3.3.205.1.5 Class V Organic Peroxide

Describes organic peroxide formulations that burn with less intensity than ordinary combustibles or those that do not sustain combustion and present no reactivity hazard, and those characterized for transport as Type G without additional subsidiary risks. [400,2019]

3.3.205.2 Organic Peroxide Storage Area

See 3.3.14.7

3.3.206 OSHA

The Occupational Safety and Health Administration of the U.S. Department of Labor. [55,2020]

3.3.207 Overcrowded

A situation where the occupant load exceeds the exit capacity or the posted occupant load.

3.3.208\* Oxidizer

Any solid or liquid material that readily yields oxygen or other oxidizing gas or that readily reacts to promote or initiate combustion of combustible materials and that can, under some circumstances, undergo a vigorous self-sustained decomposition due to contamination or heat exposure. [400,2019]

3.3.208.1 Class 1

An oxidizer that does not moderately increase the burning rate of combustible materials with which it comes into contact or a solid oxidizer classified as Class 1 when tested in accordance with the test protocol set forth in Section G.1 of NFPA 400. [400,2019]

3.3.208.2 Class 2

An oxidizer that causes a moderate increase in the burning rate of combustible materials with which it comes into contact or a solid oxidizer classified as Class 2 when tested in accordance with the test protocol set forth in Section G.1 of NFPA 400. [400,2019]

3.3.208.3 Class 3

An oxidizer that causes a severe increase in the burning rate of combustible materials with which it comes into contact or a solid oxidizer classified as Class 3 when tested in accordance with the test protocol set forth in Section G.1 of NFPA 400. [400,2019]

3.3.208.4 Class 4

An oxidizer that can undergo an explosive reaction due to contamination or exposure to thermal or physical shock and that causes a severe increase in the burning rate of combustible materials with which it comes into contact. [400,2019]

3.3.209 Ozone Generator

Equipment that causes the production of ozone.

3.3.210 Packaging

A commodity wrapping, cushioning, or container. [13,2019]

3.3.211 Paper

Felted sheets made from natural fibrous materials, usually vegetable but sometimes mineral or animal, and formed on a fine wire screen by means of water suspension.

3.3.212 Patch Kettle

Any pot or container with a capacity of less than 6 gal (22.7 L) used for preheating tar, asphalt, pitch, or similar substances for the repair of roofs, streets, floors, pipes, or similar objects.

3.3.213 Permissible Exposure Limit (PEL)

See 3.3.176.2.

3.3.214 Permit

A document issued by the AHJ for the purpose of authorizing performance of a specified activity.

3.3.215 Peroxide-Forming Chemical

A chemical that, when exposed to air, forms explosive peroxides that are shock sensitive, pressure sensitive, or heat sensitive.

3.3.216\* Personal Care

The care of residents who do not require chronic or convalescent medical or nursing care. [101,2021]

3.3.217 Pesticide

Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or for use as a plant regulator, defoliant, or desiccant.

3.3.218 Physical Hazard

A chemical for which there is scientifically valid evidence that the chemical is an organic peroxide or oxidizer.

3.3.219\* Pier

A structure, usually of greater length than width and projecting from the shore into a body of water with direct access from land, that can be either open deck or provided with a superstructure. [307,2021]

3.3.220 Portable Generator

A portable piece of equipment with an internal combustion engine-driven device that provides electrical power.

3.3.221 Pressure-Regulating Device

A device designed for the purpose of reducing, regulating, controlling, or restricting water pressure. [14, 2019]

3.3.221.1 Pressure-Reducing Valve

A valve designed for the purpose of reducing the downstream water pressure under both flowing (residual) and nonflowing (static) conditions. [14, 2019]

3.3.221.2 Pressure-Restricting Device

A valve designed for the purpose of reducing the downstream water pressure under flowing (residual) conditions only. [14, 2019]

3.3.222\* Pressure Vessel

A container, process vessel, or other component designed in accordance with the ASME Boiler and Pressure Vessel Code, DOT, or other approved standards. [400,2019]

3.3.223 Primary Containment

The first level of containment, consisting of the inside portion of that container that comes into immediate contact on its inner surface with the material being contained.

3.3.224\* Process or Processing

An integrated sequence of operations. [30,2021]

3.3.225 Process Unit (Vessel)

See 3.3.203, Operating Unit (Vessel) or Process Unit (Vessel).

3.3.226 Proprietary Information

Information regarding compounds or ingredients used in a process or production that do not qualify as trade secrets but that provide an industry or business with a competitive advantage.

3.3.227 Protection for Exposures

Fire protection for structures on property adjacent to liquid storage that is provided by (1) a public fire department or (2) a private fire brigade maintained on the property adjacent to the liquid storage, either of which is capable of providing cooling water streams to protect the property adjacent to the liquid storage. [30,2021]

3.3.228 Public Way

A street, alley, or other similar parcel of land essentially open to the outside air deeded, dedicated, or otherwise permanently appropriated to the public for public use and having a clear width and height of not less than 10 ft (3050 mm). [101,2021]

3.3.229 Purging

A method used to free the internal volume of a piping system of unwanted contents that results in the existing contents being removed or replaced. [55,2020]

3.3.230 Pyrophoric

A chemical that spontaneously ignites in air at or below a temperature of 130°F (54.5°C).

3.3.231 Quality Assurance

The procedures conducted by the registered design professionals (RDPs) responsible for design and the registered design professionals responsible for inspection that provide evidence and documentation to the RDPs, the owner, and the AHJ that the work is being constructed in accordance with the approved construction documents. [5000,2021]

3.3.232 Quality Assurance Program

A predefined set of observations, special inspections, tests, and other procedures that provide an independent record to the owner, AHJ, and RDP responsible for design that the construction is in general conformance with the approved construction documents. [5000,2021]

3.3.233\* Rack

Any combination of vertical, horizontal, and diagonal members that supports stored materials.

3.3.233.1 Double-Row Racks

Racks less than or equal to 12 ft (3.7 m) in depth or single-row racks placed back to back having an aggregate depth up to 12 ft (3.7 m), with aisles having an aisle width of at least 3.5 ft (1.1 m) between loads on racks. [13,2019]

3.3.233.2\* Movable Racks

Racks on fixed rails or guides.

3.3.233.3 Multiple-Row Racks

Racks greater than 12 ft (3.7 m) in depth or single- or double-row racks separated by aisles less than 3.5 ft (1.1 m) wide having an overall width greater than 12 ft (3.7 m). [13,2019]

3.3.233.4\* Portable Racks

Racks that are not fixed in place and can be arranged in any number of configurations. [13,2019]

3.3.233.5 Single-Row Racks

Racks that have no longitudinal flue space and that have a depth up to 6 ft (1.8 m) with aisles having a width of at least 3.5 ft (1.1 m) between loads on racks. [13,2019]

3.3.234\* Ramp

A walking surface that has a slope steeper than 1 in 20. [101,2021]

3.3.235 Recreational Fire

The noncommercial burning of materials other than rubbish for pleasure, religious, ceremonial, cooking, or similar purposes in which the fuel burned is not contained in an incinerator, a barbecue grill, or a barbecue pit, and the total fuel area is not exceeding 3 ft (0.9 m) in diameter and 2 ft (0.6 m) in height.

3.3.236 Refinery

A plant in which flammable or combustible (ignitible) liquids are produced on a commercial scale from crude petroleum, natural gasoline, or other hydrocarbon sources. [30,2021]

3.3.237 Registered Design Professional (RDP)

An individual who is registered or licensed to practice his/her respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed. [5000,2021]

3.3.238 Relocatable Power Tap

A device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end, and has overcurrent protection.

3.3.239 RF Emitting Device

A device that emits a radio frequency signal as part of a two-way radio communications enhancement system.

3.3.239.1 Active RF Emitting Device

Any type of circuit component that requires an ac or dc power source with the ability to electrically control electron flow and/or amplification of RF signal, including but not limited to signal boosters, repeaters, bi-directional amplifiers, and fiber distributed antenna systems.

3.3.239.2 Passive RF Emitting Device

A device that does not require an external ac or dc source of power for its operation and does not provide amplification of the RF signal, including but not limited to coax, couplers, splitters, and passive antennas.

3.3.240 RF Radio Frequency (RF)

A measurement representing the oscillation rate of electromagnetic radiation spectrum, or electromagnetic radio waves, from public safety frequency bands as specified by the fire code official.

3.3.241 Row

A minimum yard storage unit comprised of adjoining cotton bales.

3.3.242 Rubberized Asphalt Melter (Melter)

Portable equipment used for the heating of rubberized asphalt material that is a mix of asphalt, rubber polymer, and filler material.

3.3.243 Rural

Those areas that are not unsettled wilderness or uninhabitable territory but are sparsely populated with densities below 500 persons per square mile. [1142, 2017]

3.3.244\* Safety Can

A listed container of not more than 5.3 gal (20 L) capacity having a screen or strainer in each fill and pour opening, and having a spring-closing lid and spout cover, designed to safely relieve internal pressure when exposed to fire. [30,2021]

3.3.245\* Safety Data Sheet (SDS)

The document that describes composition of a material, hazardous properties and hazard mitigation, and disposal information. [400,2019]

3.3.246 Sales Display Area

See 3.3.14.10.

3.3.247 Salvage Vehicle

A vehicle that is dismantled for parts or awaiting destruction.

3.3.248 Self-Closing

Equipped with an approved device that ensures closing after opening. [101,2021]

3.3.249 Separation of Hazards

Physically separated by a specified distance, construction, or appliance. [55,2020]

3.3.250 Shop Drawings

Scaled working drawings, equipment cutsheets, and design calculations. (See 3.3.12, Plan, of NFPA 1031.) [1031, 2014]

3.3.251\* Signal

An indication of a condition communicated by electrical, visible, audible, wireless, or other means. [72, 2016]

3.3.251.1\* Alarm Signal

A signal that results from the manual or automatic detection of an alarm condition. [72, 2016]

3.3.251.2\* Fire Alarm Signal

A signal that results from the manual or automatic detection of a fire alarm condition. [72, 2016]

3.3.251.3\* Supervisory Signal

A signal that results from the detection of a supervisory condition. [72, 2016]

3.3.251.4\* Trouble Signal

A signal that results from the detection of a trouble condition. [72, 2016]

3.3.252 Simple Asphyxiant Gas

See 3.3.146.15.

3.3.253 Smoke Alarm

A single or multiple-station alarm responsive to smoke. [72, 2016]

3.3.254\* Smoke Barrier

A continuous membrane, or a membrane with discontinuities created by protected openings, where such membrane is designed and constructed to restrict the movement of smoke. [5000,2021]

Upcodes Diagrams

3.3.255 Smoke Compartment

See 3.3.69.2.

3.3.256\* Smoke Partition

Diagram

A continuous membrane that is designed to form a barrier to limit the transfer of smoke. [101,2021]

UpCodes Diagrams

P

Smoke Partitions vs. Smoke Barriers (NFPA)

3.3.257 Smoking

The use or carrying of a lighted pipe, cigar, cigarette, tobacco, or any other type of smoking substance.

3.3.258 Smoking Area

See 3.3.14.11.

3.3.259 Solid

3.3.259.1\* Combustible Particulate Solid

An oxidizable, solid-phase material comprising distinct particles or pieces. [69,2019]

3.3.259.2\* Flammable Solid

A solid substance, other than a substance defined as a blasting agent or explosive, that is liable to cause fire resulting from friction or retained heat from manufacture, that has an ignition temperature below 212°F (100°C), or that burns so vigorously or persistently when ignited that it creates a serious hazard. [400,2019]

3.3.260 Solid Material

A material that has a melting point, decomposes, or sublimes at a temperature greater than 68°F (20°C). [5000,2021]

3.3.261\* Solid Shelving

Shelving that is fixed in place, slatted, wire mesh, or other type of shelves located within racks. The area of a solid shelf is defined by perimeter aisle or flue space on all four sides or by the placement of loads that block openings that would otherwise serve as the required flue spaces. Solid shelves having an area equal to or less than 20 ft2 (1.9 m2) are defined as open racks. Shelves of wire mesh, slats, or other materials more than 50 percent open and where the flue spaces are maintained are defined as open racks. [13,2019]

3.3.262 Special Use

See 3.3.293.3

3.3.263 Spray Area

See 3.3.14.12.

3.3.264\* Spray Booth

A power-ventilated enclosure for a spray application operation or process that confines and limits the escape of the material being sprayed, including vapors, mists, dusts, and residues that are produced by the spraying operation and conducts or directs these materials to an exhaust system. [33,2018]

3.3.265\* Spray Room

A power-ventilated fully enclosed room with a specified fire resistance rating used for spraying of flammable or combustible materials. [33,2018]

3.3.266 Standard Cubic Foot (scf) of Gas

An amount of gas that occupies one cubic foot at an absolute pressure of 14.7 psi (101 kPa) and a temperature of 70°F (21 °C). [55,2020]

3.3.267 Standard Temperature and Pressure (STP)

A temperature of 70°F (21°C) and a pressure of 1 atmosphere (14.7 psi or 760 mm Hg).

3.3.268 Standpipe System

See 3.3.278.13.

3.3.269 Storage

3.3.269.1 Banded Tire Storage

Storage in which a number of tires are strapped together.

3.3.269.2 Cartoned Storage

Storage consisting of corrugated cardboard or paperboard containers that fully enclose the commodity.

3.3.269.3 Detached Storage

Storage in a separate building or in an outside area located away from all structures.

3.3.269.4 High-Piled Storage

Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 12 ft (3.7 m) in height. [13,2019]

3.3.269.5 Isolated Storage

Storage in a different storage room or in a separate and detached building located at a safe distance.

3.3.269.6 Laced Tire Storage

Tires stored where the sides of the tires overlap, creating a woven or laced appearance. [See FigureA.34.9.1(g).] [13,2019]

3.3.269.7\* Miscellaneous Tire Storage

The storage of rubber tires that is incidental to the main use of the building; storage areas do not exceed 2000 ft2 (186 m2), and on-tread storage piles, regardless of storage method, do not exceed 25 ft (7.6 m) in the direction of the wheel holes. Acceptable storage arrangements include (a) on-floor, on-side storage up to 12 ft (3.7 m) high; (b) on-floor, on-tread storage up to 5 ft (1.5 m) high; (c) double-row or multirow fixed or portable rack storage on-side or on-tread up to 5 ft (1.5 m) high; (d) single-row fixed or portable rack storage on-side or on-tread up to 12 ft (3.7 m) high; and (e) laced tires in racks up to 5 ft (1.5 m) in height. [13,2019]

3.3.269.8 On-Side Tire Storage

Tires stored horizontally or flat. [13,2019]

3.3.269.9 On-Tread Tire Storage

Tires stored vertically or on their treads. [13,2019]

3.3.269.10 Palletized Tire Storage

Storage on portable racks of various types utilizing a conventional pallet as a base. [13,2019]

3.3.269.11 Segregated Storage

Storage located in the same room or inside area that is physically separated by distance from incompatible materials.

3.3.269.12 Yard Storage

Storage of commodities in outdoor areas.

3.3.270 Storage Aids

Commodity storage devices, such as pallets, dunnage, separators, and skids. [13,2019]

3.3.271 Story

The portion of a building located between the upper surface of a floor and the upper surface of the floor or roof next above. [5000,2021]

3.3.271.1 Occupiable Story

A story occupied by people on a regular basis. [101,2021]

3.3.272 Street

A public thoroughfare that has been dedicated for vehicular use by the public and can be used for access by fire department vehicles. [101,2021]

3.3.273\* Street Floor

A story or floor level accessible from the street or from outside the building at the finished ground level, with the floor level at the main entrance located not more than three risers above or below the finished ground level, and arranged and utilized to qualify as the main floor. [101,2021]

3.3.274 Structural Element

The columns and girders, beams, trusses, joists, braced frames, moment-resistant frames, and vertical and lateral resisting elements, and other framing members that are designed to carry any portion of the dead or live load and lateral forces, that are essential to the stability of the building or structure. [5000,2021]

3.3.275\* Structure

That which is built or constructed. [101,2021]

3.3.275.1\* Open Structure

A structure that supports equipment and operations not enclosed within building walls. [101, 2021]

3.3.276\* Suburb or Suburban

Those moderately inhabited areas with population densities of at least 500 persons per square mile but less than 1000 persons per square mile. [1142, 2017]

3.3.277 Summarily Abate

To immediately judge a condition to be a fire hazard to life or property and to order immediate correction of such condition.

3.3.278 System

Several items of equipment assembled, grouped, or otherwise interconnected for the accomplishment of a purpose or function.

3.3.278.1\* Bulk Hydrogen Compressed Gas System

A gaseous hydrogen (GH2) system with a storage capacity of more than 5000 scf (141.6 Nm3) of compressed hydrogen gas. [55,2020]

3.3.278.2 Bulk Inert Gas System

An assembly of equipment that consists of, but is not limited to, storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds, and piping, with a storage capacity of more than 20.000 scf (566 Nm 3) of inert gas, including unconnected reserves on hand at the site, and that terminates at the source valve. [55,2020]

3.3.278.3 Bulk Liquefied Hydrogen System

A liquefied hydrogen (LH2) system with a storage capacity of more than 39.7 gal (150 L) of liquefied hydrogen. [55,2020]

3.3.278.4\* Bulk Oxygen System

An assembly of equipment, such as oxygen storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds, and interconnecting piping, that has a storage capacity of more than 20.000 scf (566 Nm3) of oxygen and that terminates at the source valve. [55,2020]

3.3.278.5 Central Station Service Alarm System

A system or group of systems in which the operations of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a listed central station that has competent and experienced servers and operators who, upon receipt of a signal, take such action as required by NFPA 72. Such service is to be controlled and operated by a person, firm, or corporation whose business is the furnishing, maintaining, or monitoring of supervised alarm systems. [72, 2016]

3.3.278.6 Compressed Gas System

An assembly of equipment designed to contain, distribute, or transport compressed gases. [318, 2018]

3.3.278.7 Continuous Gas Detection System

A gas detection system in which the instrument is maintained in continuous operation and the interval between sampling of any point does not exceed 30 minutes. [55,2020]

3.3.278.8 Cylinder Containment System

A gastight recovery system comprising equipment or devices that can be placed over a leak in a compressed gas container, thereby stopping or controlling the escape of gas from the leaking container. [55,2020]

3.3.278.9 Dedicated Smoke-Control System

A system that is intended for the purpose of smoke control only, which are separate systems of air moving and distribution equipment that do not function under normal building operating conditions.

3.3.278.10 Fire Alarm System

A system or portion of a combination system that consists of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response to those signals. [72, 2016]

3.3.278.11 Fire Protection System

Any fire alarm device or system or fire-extinguishing device or system, or combination thereof, that is designed and installed for detecting, controlling, or extinguishing a fire or otherwise alerting occupants, or the fire department, or both, that a fire has occurred. [1141,2017]

3.3.278.12 Nondedicated Smoke-Control System

A smoke-control system that shares components with some other system(s), such as the building HVAC system, which changes its mode of operation to achieve the smoke-control objective.

3.3.278.13\* Standpipe System

An arrangement of piping, valves, hose connections, and associated equipment installed in a building or structure, with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire, thereby protecting a building or structure and its contents in addition to protecting the occupants. [14,2019]

3.3.278.14 Treatment System

An assembly of equipment capable of processing a hazardous gas and reducing the gas concentration to a predetermined level at the point of discharge from the system to the atmosphere. [55,2020]

3.3.278.15\* Vapor Processing System

A system designed to capture and process vapors displaced during transfer or filling operations by use of mechanical or chemical means. [30,2021]

3.3.278.16\* Vapor Recovery System

A system designed to capture and retain, without processing, vapors displaced during transfer or filling operations. [30,2021]

3.3.279 Tank

3.3.279.1 Aboveground Storage Tank

A horizontal or vertical tank that is listed and intended for fixed installation, without backfill, above or below grade and is used within the scope of its approval or listing. [30A,2021]

3.3.279.2 Aboveground Tank

A storage tank that is installed above grade, at grade, or below grade without backfill. [30,2021]

3.3.279.2.1 Protected Aboveground Tank

An atmospheric aboveground storage tank with integral secondary containment and thermal insulation that has been evaluated for resistance to physical damage and for limiting the heat transferred to the primary tank when exposed to a hydrocarbon pool fire and is listed in accordance with UL 2085, Protected Aboveground Tanks for Flammable and Combustible Liquids, or an equivalent test procedure. [30:22.2.3]

3.3.279.3 ASME Tank

See 3.3.72.1, ASME Container.

3.3.279.4\* Portable Tank

Any vessel having a liquid capacity over 60 gal (230 L) intended for storing liquids and not intended for fixed installation. [30,2021]

3.3.279.5 Secondary Containment Tank

A tank that has an inner and outer wall with an interstitial space (annulus) between the walls and that has a means for monitoring the interstitial space for a leak. [30,2021]

3.3.279.6\* Stationary Tank

A packaging designed primarily for stationary installations not intended for loading, unloading, or attachment to a transport vehicle as part of its normal operation in the process of use. [55,2020]

3.3.279.7 Storage Tank

Any vessel having a liquid capacity that exceeds 60 gal (230 L), is intended for fixed installation, and is not used for processing. [30,2021]

3.3.280 TC

Transport Canada. [55,2020]

3.3.281 Temporary Wiring

Approved wiring for power and lighting during a period of construction, remodeling, maintenance, repair, or demolition, and decorative lighting, carnival power and lighting, and similar purposes.

3.3.282 3D Printer

A machine used in the additive manufacturing process for fabricating objects through the deposition of a material using a printhead, nozzle, or another printer technology.

3.3.283 Tire

3.3.283.1 Rubber Tires

Pneumatic tires for passenger automobiles, aircraft, light and heavy trucks, trailers, farm equipment, construction equipment (off-the-road), and buses. [13,2019]

3.3.283.2 Scrap Tire

A tire that can no longer be used for its original purpose due to wear or damage.

3.3.284 Toxic Material

See 3.3.187.14.

3.3.285\* Traffic Calming Device

A roadway design element utilized to reduce vehicle speeds, decrease motor vehicle volumes, and increase safety for pedestrians and nonmotorized vehicles.

3.3.286\* Transfilling

The process of transferring a gas, either in compressed or liquid form from one cylinder or container to another cylinder or container.

3.3.287\* Tube Trailer

A truck or semitrailer on which a number of very long compressed gas tubular cylinders have been mounted and manifolded into a common piping system. [55,2020]

3.3.288 Unauthorized Discharge

A release or emission of materials in a manner that does not conform to the provisions of this Code or applicable public health and safety regulations.

3.3.289 Unit Operation or Unit Process

A segment of a physical or chemical process that might or might not be integrated with other segments to constitute the manufacturing sequence. [30,2021]

3.3.290 Unit Process

See 3.3.289, Unit Operation or Unit Process.

3.3.291 Unit (Vessel), Operating or Process

See 3.3.203.

3.3.292 Unstable (Reactive) Material

See 3.3.187.15.

3.3.293\* Use

To place a material, including solids, liquids, and gases, into action. [400,2019]

3.3.293.1\* Closed System Use

Use of a solid or liquid hazardous material in a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal operations and all uses of compressed gases. [400,2019]

3.3.293.2\* Open System Use

Use of a solid or liquid hazardous material in a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated or the product is exposed to the atmosphere during normal operations. [400,2019]

3.3.293.3 Special Use

A use that includes, but is not limited to, events or occurrences during which life safety-threatening situations or fire hazards exist or are likely to exist as determined by the AHJ.

3.3.294 Valet Trash Collection

A service that collects occupant-generated trash or recyclable materials from dwelling units, where the trash is left outside of dwelling units for scheduled pickup.

3.3.295 Valve

3.3.295.1 Indicating Valve

A valve that has components that show if the valve is open or closed. Examples are outside screw and yoke (OS&Y) gate valves and underground gate valves with indicator posts.

3.3.295.2 Reduced Flow Valve

A valve equipped with a restricted flow orifice that is designed to reduce the maximum flow from the valve under full flow conditions.

3.3.295.3 Valve Outlet Cap or Plug

A removable device that forms a gastight seal on the outlet to the control valve that is provided on a source containing a compressed gas or cryogenic fluid. [55,2020]

3.3.295.4 Valve Protection Cap

A rigid, removable cover provided for container valve protection during handling, transportation, and storage. [55,2020]

3.3.295.5 Valve Protection Device

A device attached to the neck ring or body of a cylinder for the purpose of protecting the cylinder valve from being struck or from being damaged by the impact resulting from a fall or an object striking the cylinder.

3.3.296 Vapor Pressure

The pressure, measured in pounds per square inch, absolute (psia), exerted by a liquid, as determined by ASTM D323, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method). [30,2021]

3.3.297 Vapor Processing System

See 3.3.278.15.

3.3.298 Vapor Recovery System

See 3.3.278.16.

3.3.299 Vehicle-Mounted Generator

A mobile piece of equipment with an internal-combustion-engine-driven device that provides electrical power and is mounted on a motorized vehicle or trailer for transport.

3.3.300 Warehouse

3.3.300.1 General-Purpose Warehouse

A separate, detached building or portion of a building used only for warehousing-type operations and classified as a "storage — low hazard" or "storage — ordinary hazard" occupancy by the building code and by NFPA 101. [30,2021]

3.3.300.2 Liquid Warehouse

A separate, detached building or an attached building that is used for warehousing-type operations for liquids and whose exterior wall comprises at least 25 percent of the building perimeter. [30,2021]

3.3.301 Water Capacity

The amount of water at 60°F (16°C) required to fill a container. [58,2020]

3.3.302\* Wharf

A structure at the shoreline that has a platform built along and parallel to a body of water with either an open deck or a superstructure. [307,2021]

3.3.303\* Wildland/Urban Interface

An area where wildland fuels abut structures, with a clear line of demarcation between residential, business, and public structures and wildland fuels. [1144, 2018]

3.3.304 Wood Panel

Board or sheet made from veneers, particles, or fibers of wood and includes plywood, oriented strand board, and similar wood products.

3.3.305 Written Notice

A notification in writing delivered in person to the individual or parties intended, or delivered at, or sent by certified or registered mail to, the last residential or business address of legal record.

3.4 Special Performance-Based Definitions

3.4.1 Alternative Calculation Procedure

A calculation procedure that differs from the procedure originally employed by the design team but that provides predictions for the same variables of interest. [101,2021]

3.4.2 Analysis

3.4.2.1 Sensitivity Analysis

An analysis performed to determine the degree to which a predicted output will vary given a specified change in an input parameter, usually in relation to models. [5000,2021]

3.4.2.2 Uncertainty Analysis

An analysis intended to (1) identify key sources of uncertainties in the predictions of a model, (2) assess the potential impacts of these uncertainties on the predictions, and (3) assess the likelihood of these potential impacts. Per this definition, sensitivity analysis performs some but not all of the functions of uncertainty analysis. [805,2020]

3.4.3 Data Conversion

The process of developing the input data set for the assessment method of choice. [101,2021]

3.4.4 Design Fire Scenario

See 3.4.9.1.

3.4.5\* Design Specification

A building characteristic and other conditions that are under the control of the design team. [5000,2021]

3.4.6 Design Team

A group of stakeholders including, but not limited to, representatives of the architect, client, and any pertinent engineers and other designers. [101,2021]

3.4.7\* Exposure Fire

A fire that starts at a location that is remote from the area being protected and grows to expose that which is being protected. [101,2021]

3.4.8\* Fire Model

Mathematical prediction of fire growth, environmental conditions, and potential effects on structures, systems, or components based on the conservation equations or empirical data. [805,2020]

3.4.9\* Fire Scenario

A set of conditions that defines the development of fire, the spread of combustion products throughout a building or portion of a building, the reactions of people to fire, and the effects of combustion products. [101,2021]

3.4.9.1 Design Fire Scenario

A fire scenario selected for evaluation of a proposed design. [101,2021]

3.4.10\* Fuel Load

The total quantity of combustible contents of a building, space, or fire area. [5000,2021]

3.4.11 Incapacitation

A condition under which humans do not function adequately and become unable to escape untenable conditions. [101,2021]

3.4.12 Input Data Specification

Information required by the verification method. [101,2021]

3.4.13 Occupant Characteristics

The abilities or behaviors of people before and during a fire. [101,2021]

3.4.14\* Performance Criteria

Threshold values on measurement scales that are based on quantified performance objectives. [101,2021]

3.4.15\* Proposed Design

A design developed by a design team and submitted to the AHJ for approval. [101,2021]

3.4.16 Safe Location

3.4.17 Safety Factor

A factor applied to a predicted value to ensure that a sufficient safety margin is maintained. [101,2021]

3.4.18 Safety Margin

The difference between a predicted value and the actual value where a fault condition is expected. [101,2021]

3.4.19 Sensitivity Analysis

See 3.4.2.1.

3.4.20 Stakeholder

An individual, or representative of same, having an interest in the successful completion of a project. [101,2021]

3.4.21 Uncertainty Analysis

See 3.4.2.2.

3.4.22 Verification Method

A procedure or process used to demonstrate or confirm that the proposed design meets the specified criteria. [101,2021]





