

4401.2(Cont.)

UTILITY SHED: Any building designed for storage of small equipment, tools, and/or other miscellaneous items of use and which shall have maximum dimensions of 10'-0" length, 10'-0" width, and 7'-0" height.

4402 PERMITS AND INSPECTIONS

4402.1 PERMITS:

(a) A permit will be required as set forth in Chapter 3 of this Code for the construction, fabrication, installation, alteration or repair of any rigid awning, canopy or canopy shutter, or screen enclosure.

(b) Application for permit shall be accompanied by plans, and when required by the Building Official, such plans shall be prepared by, and bear the seal of, a Registered Professional Engineer.

4402.2 INSPECTION: The permit holder shall request the Building Official to make a final inspection when the work is completed.

4402.3 POSTING: Structures designed to be readily removed or repositioned during periods of high wind velocity shall be posted with a legible and readily visible decal or painted instructions to the owner or tenant to remove or reposition the structure or part thereof during such periods of time as are designated by the U.S. Weather Bureau as being a hurricane warning or alert.

4403 DESIGN

4403.1 LOADS:

(a) Rigid awnings, canopies, canopy shutters and screened enclosures shall be designed to resist the loads set forth in Chapter 23 of this Code except that structures or parts thereof which are intended to be removed or repositioned during periods of high wind velocity shall be designed in their open or extended position to resist velocity pressures not less than that based on 75 MPH wind with applicable shape factors and to resist not less than 15 psf roof live load.

(b) Where such structure is intended to be folded or otherwise repositioned to close an opening when the building is unattended or act as a storm shutter the design in the closed position shall also comply with Sections 2309 and 3513 of this Code.

(c) Utility sheds shall be designed to resist a wind load equivalent to a force of not less than 15 psf on the structure, and a live load of not less than 15 psf on the roof.

4403.2 ALLOWABLE STRESSES: The allowable stressed shall not exceed those set forth in this Code for the materials of construction.

not less than 3 sq ft (0.28 m²) per person. Applies to reviewing stands, grandstands and bleachers.

SALLYPORT (Security Vestibule). A compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.

SAND-LIGHTWEIGHT CONCRETE. Concrete made with a combination of expanded clay, shale, slag, or slate or sintered fly ash and natural sand. Its unit weight is generally between 105 and 120 pcf (1680 and 1920 kg/m³).

SCREEN ENCLOSURE. A building or part thereof, in whole or in part self-supporting, and having walls of insect screening with or without removable vinyl or acrylic wind break panels and a roof of insect screening, plastic, aluminum or similar lightweight material.

SCUPPER. An opening in a wall or parapet that allows water to drain from a roof.

SECONDARY CONTAINMENT. The level of containment that is external to and separate from primary containment.

SECURE. Safe from intrusion or contained separately to prevent mixing with other materials.

★ **SELF-CLOSING.** As applied to a fire door or other opening, means normally closed and equipped with an approved device which will insure closing after having been opened for use.

SELF-PRESERVATION. A client who is capable of self-preservation is one who can evacuate the building without direct intervention by a staff member.

SENSITIZER. A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

SEPARATE ATMOSPHERE. The atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.

SEPARATE GAS STORAGE ROOM. A separate enclosed area which is part of or attached to a building and is used for the storage of toxic or highly toxic compressed or liquefied gases.

SERVICE STATION. Defined in 404.2.

SHAFT. A vertical opening extending through one or more stories of a building.

SHALL. As used in this code, means mandatory.

SHEAR WALL. A wall, bearing or nonbearing, designed to resist seismic forces, from other than its own mass, acting in the plane of the wall.

SHEAR WALL SEGMENT. A wall or portion thereof which transfers in-plane lateral shear loads to a wall or foundation below and resists overturning.

SHINGLE SIGN. A projection or wall sign not over 6 sq ft (0.56 m²) in area, constructed of metal or other noncombustible material attached securely to a building and not projecting more than 24 inches (610 mm) over public property.

SHOTCRETE. Mortar or concrete which is pneumatically projected at a high velocity onto a surface.

SILICEOUS AGGREGATE CONCRETE. Concrete made with normal weight aggregates consisting mainly of silica or compounds other than calcium or magnesium carbonate.

SINGLE PLY MEMBRANE. A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers.

SITE. A parcel of land bounded by a property line or a designated portion of a public right-of-way.

SMOKE DAMPER. A listed device that meets the requirements of UL 555S and is designed to resist the passage of air and smoke.

SMOKE DETECTOR. An approved listed detector sensing either visible or invisible particles of combustion.

SMOKE DETECTOR, MULTIPLE-STATION. Single-station smoke detectors which are capable of being interconnected such that actuation of one causes all integral or separate audible alarms to operate.

SMOKE DETECTOR, SINGLE-STATION. An assembly incorporating the detector, control equipment and alarm sounding device in one unit, which is operated from a power supply either in the unit or obtained at the point of installation.

SMOKE-PROTECTED ASSEMBLY SEATING. Seating served by a means of egress that is not subject to smoke accumulation within or under a structure.

SMOKEPROOF ENCLOSURE. An exit consisting of a vestibule and continuous stairway enclosed from the highest point to the lowest point and designed so that the movement of products of combustion produced by a fire occurring in any part of the building into the smokeproof tower is limited.

SNOW LOAD. The forces superimposed on a building or structure resulting from the accumulation of snow.

SPECTACULAR SIGN. An outdoor advertising display sign, advertising copy usually animated, constructed of metal, wired for lights or luminous tubing, or both, with copy action controlled by the flashed circuit breakers or matographs and attached on an open face steel structure built especially for the purpose. Spectacular signs may be built

CHAPTER 20

LIGHT METAL ALLOYS

SECTION 2001 GENERAL

2001.1 Scope. Provisions of this chapter shall govern the quality, design, fabrication and erection of light metal alloys used in building construction.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Section 2003.

SECTION 2002 STRUCTURAL ALUMINUM

2002.1 General. The quality, design, fabrication and erection of aluminum used structurally in buildings or structures shall conform to good engineering practice, the provisions of this chapter and other applicable requirements of this code.

Exception: All buildings located within the high-velocity hurricane zone shall comply with the requirements of Section 2003.

2002.2 Structural aluminum construction. The design, fabrication and assembly of structural aluminum for buildings or structures shall conform to AA-ASM 35 and *Specifications for Aluminum Structures, Aluminum Design Manual*, Part I-A and I-B, of the Aluminum Association. The use of aluminum alloys not listed in the manual shall be permitted provided their standard of performance is not less than those required in the manual and the performance is substantiated to the satisfaction of the building official.

2002.3 Screen enclosures.

2002.3.1 Actual wall thickness of extruded aluminum members shall be not less than 0.040 inch (1 mm).

2002.3.2 Screen density shall be a maximum of 20 x 20 mesh.

2002.3.3 Vinyl and acrylic panels shall be removable. Removable panels shall be identified as removable by a decal. The identification decal shall essentially state "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)." Decals shall be placed such that the decal is visible when the panel is installed.

2002.4 Design. Structural members supporting screen enclosures shall be designed to support minimum wind loads given in Table 2002.4. Where any value is less than 10 psf (479 Pa) use 10 psf.

2002.4.1 The following design guides shall be accepted as conforming to accepted engineering practices:

AAF Guide to Aluminum Construction in High Wind Areas.

2002.5 Wall panels. The minimum thickness for formed sheet aluminum structural wall panels shall be not less than 0.024 inch (0.6 mm), subject to approved tolerances.

SECTION 2003 HIGH-VELOCITY HURRICANE ZONES—ALUMINUM

2003.1 Design. Aluminum members shall be designed by methods admitting of rational analysis according to established principles of mechanics.

2003.2 Standards. The following standards are hereby adopted as set forth in Chapter 35:

1. Specifications for Aluminum Structures. The Aluminum Association, Inc.
2. The Aluminum Formed Sheet Building Sheathing Design Guide. The Aluminum Association, Inc.
3. The Commentary on Specifications for Aluminum Structures. The Aluminum Association, Inc.
4. Engineering Data for Aluminum Structures. The Aluminum Association, Inc.
5. Guidelines for Structural Condition Assessment of Existing Buildings. ANSI/ASCE 11.

2003.3 Workmanship. Aluminum construction shall be in conformance with the tolerances, quality and methods of construction as set forth in Section 2003.2 and the American Welding Society's Structural Welding Code-Aluminum (D1.2).

2003.4 Definitions.

PRIMARY MEMBER. Structural framing members providing structural support to other members and/or surfaces of a structure including, but not limited to beams, posts, columns, joists, structural gutters, headers, etc.

SECONDARY MEMBERS. Structural framing members which do not provide basic support for the entire structure, generally including, but not limited to, such members as purlins, kickplate rails, chair rails, roof or wall panels, etc.

STRUCTURAL MEMBERS. Members or sections that provide support to an assembly and/or resist applied loads.

2003.5 Identification. Aluminum for structural elements shall at all times be segregated or otherwise handled in the fabricator's plant so that the separate alloys and tempers are positively identified and, after completion of fabrication, shall be marked to identify the alloy and temper. Such markings shall be affixed to complete members and assemblies or to boxed or bundled shipments of multiple units prior to shipment from the fabricator's plant.

FLYGALLERY. A raised floor area above a stage from which the movement of scenery and operation of other stage effects are controlled.

FOOTBOARDS. That part of a raised seating facility other than an aisle or cross aisle upon which the occupant walks to reach a seat. Applies to reviewing stands, grandstands and bleachers.

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GALLERY. That portion of the seating space of an assembly room having a seating capacity of more than 10 located above a balcony.

GARDEN MAUSOLEUM. A mausoleum for the public built without heat or air conditioning but may contain an open-air committal area.

GLASS FIBER BOARD. Fibrous glass roof insulation consisting of inorganic glass fibers formed into rigid boards using a binder. The board has a top surface faced with asphalt and draft reinforced with a glass fiber.

GRADE. A reference plane representing the average of finished ground level adjoining the building at all exterior walls. When the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or between the building and a point 6 ft (1829 mm) from the building, whichever is closer to the building.

GRADE, LUMBER. The division of sawn lumber into quality classes with respect to its physical and mechanical properties as defined in published lumber manufacturer's standard grading rules.

GRANDSTANDS. Tiered or stepped seating facilities.

GRIDIRON. The structural framing over a stage supporting equipment for hanging or flying scenery and other stage effects.

GROSS LEASABLE AREA. The total floor area designed for tenant occupancy and exclusive use. The area of tenant occupancy is measured from the center lines of joint partitions to the outside of the tenant walls. All tenant areas, including areas used for storage, shall be included in calculating gross leasable area.

GROUND FLOOR DWELLING UNIT. A dwelling unit with a primary entrance and habitable space at grade.

GROUND SIGN. An outdoor advertising display sign supported by uprights or braces in or upon the ground, or mounted on a vehicle, trailer or mobile structure principally used for the purpose of advertising.

GROUP DAY-CARE HOME. A group day-care home is a day-care home in which at least 7 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 hr per day with no more than 3 clients incapable of self-preservation.

GROUT. Mixture of cementitious materials and aggregate to which sufficient water is added to produce pouring consistency without segregation of the constituents.

GUARDRAIL SYSTEM. A system of building components located near the open sides of elevated walking surfaces.

GYPSUM BACKING BOARD. A gypsum board used for interior applications as a backing in multi layer systems for gypsum wallboard, acoustical tile or other dry cladding, manufactured in accordance with ASTM C 442.

GYPSUM SHEATHING. A gypsum board used as a backing for exterior surface materials, manufactured with water-repellent paper and which may be manufactured with a water-resistant core, in accordance with ASTM C 79.

GYPSUM WALLBOARD. A gypsum board manufactured in accordance with ASTM C 36 used primarily as an interior surfacing for building structures.

GYPSUM WALLBOARD, TYPE X. A gypsum board specially manufactured to provide specific fire-resistant characteristics.

HABITABLE SPACE. A space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, screen enclosures, storage or utility space, and similar areas are not considered habitable space.

HANDRAIL. A horizontal or sloping rail grasped by hand for guidance or support.

HAZARD CONTENTS, HIGH. Contents which are liable to burn with extreme rapidity or from which poisonous fumes or explosions are to be feared in case of fire.

HAZARD CONTENTS, LOW. Contents of such low combustibility that no self-propagating fire therein can occur. The only probable danger requiring the use of emergency exits will be from panic, fumes, smoke or fire from some external source.

HAZARD CONTENTS, ORDINARY. Contents which are liable to burn with moderate rapidity or to generate a considerable volume of smoke but from which neither poisonous fumes nor explosions are to be feared in case of fire.