Anchor assembly means any device or other means designed to transfer home anchoring loads to the ground.

Anchoring equipment means ties, straps, cables, turnbuckles, chains, and other approved components, including tensioning devices that are used to secure a manufactured home to anchor assemblies.

Anchoring system means a combination of anchoring equipment and anchor assemblies that will, when properly designed and installed, resist the uplift, overturning, and lateral forces on the manufactured home and on its support and foundation system.

Diagonal tie means a tie intended to resist horizontal or shear forces, but which may resist vertical, uplift, and overturning forces.

Footing: means that portion of the support system that transmits loads directly to the soil.

Foundation system means a system of support that is capable of transferring all design loads to the ground, including elements of the support system as defined in this section, or a site-built permanent foundation that meets the requirements of 24 CFR 3282.12.

Ground anchor means a specific anchoring assembly device designed to transfer home anchoring loads to the ground.

Loads: (1) *Dead load:* means the weight of all permanent construction including walls, floors, roof, partition, and fixed service equipment.

(2) *Live load:* means the weight superimposed by the use and occupancy of the manufactured home, including wind load and snow load, but not including dead load.

(3) *Wind load:* means the lateral or vertical pressure or uplift on the manufactured home due to wind blowing in any direction.

Main frame: means the structural component on which is mounted the body of the manufactured home.

Pier: means that portion of the support system between the footing and manufactured home exclusive of caps and shims.

Sheathing: means material which is applied on the exterior side of a building frame under the exterior weather resistant covering.

Stabilizing devices means all components of the anchoring and support systems, such as piers, footings, ties, anchoring equipment, anchoring assemblies, or any other equipment, materials, and methods of construction that support and secure the manufactured home to the ground.

Support system: means a combination of footings, piers, caps, and shims that will, when properly installed, support the manufactured home.

Support system means any pilings, columns, footings, piers, foundation walls, shims, and any combination thereof that, when properly installed, support the manufactured home.

Tie: means straps, cable, or securing devices used to connect the manufactured home to ground anchors.

Vertical tie: means a tie intended to resist the uplifting or overturning forces.

[58 FR 55005, Oct. 25, 1993; 59 FR 15113, Mar. 31, 1994, as amended at 72 FR 59361, Oct. 19, 2007]

§ 3280.303 General requirements.

(a) *Minimum requirements.* The design and construction of a manufactured home shall conform with the provisions of this standard. Requirements for any size, weight, or quality of material modified by the terms of *minimum, not less than, at least,* and similar expressions are minimum standards. The manufacturer or installer may exceed these standards provided such deviation does not result in any inferior installation or defeat the purpose and intent of this standard.

(b) *Construction.* All construction methods shall be in conformance with accepted engineering practices to insure durable, livable, and safe housing and shall demonstrate acceptable workmanship reflecting journeyman quality of work of the various trades.

(c) *Structural analysis.* The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur. (See subparts E and J.)

(d) [Reserved]

(e) *New materials and methods.* (1) Any new material or method of construction not provided for in this standard

and any material or method of questioned suitability proposed for use in the manufacture of the structure shall nevertheless conform in performance to the requirements of this standard.

(2) Unless based on accepted engineering design for the use indicated, all new manufactured home materials, equipment, systems or methods of construction not provided for in this standard shall be subjected to the tests specified in paragraph (g) of this section.

(f) *Allowable design stress.* The design stresses of all materials shall conform to accepted engineering practice. The use of materials not certified as to strength or stress grade shall be limited to the minimum allowable stresses under accepted engineering practice.

(g) *Alternative test procedures.* In the absence of recognized testing procedures either in the Standards in this part or in the applicable provisions of those standards incorporated in this part by reference, the manufacturer electing this option must develop or cause to be developed testing procedures to demonstrate the structural properties and significant characteristics of the material, assembly, subassembly component, or member, except for testing methods involving one-piece metal roofing as would be required in §3280.305(c)(1)(iii). Such testing procedures become part of the manufacturer's approved design. Such tests must be witnessed by an independent licensed professional engineer or architect or by a recognized testing organization. Copies of the test results must be kept on file by the manufactured home manufacturer.

[40 FR 58752, Dec. 18, 1975. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 58 FR 55005, Oct. 25, 1993; 59 FR 2469, Jan. 14, 1994; 70 FR 72043, Nov. 30, 2005]

§ 3280.304 Materials.

(a) Dimension and board lumber shall not exceed 19 percent moisture content at time of installation.

(b)(1) Standards for some of the generally used materials and methods of construction are listed in the following table:

Aluminum

Aluminum Design Manual, Specifications and Guidelines for Aluminum Structures, Part 1-A, Sixth Edition, October 1994, and Part 1-B, First Edition, October 1994.

Steel

Specification for Structural Steel Buildings—Allowable Stress Design and Plastic Design—AISC–S335, 1989. The following parts of this reference standard are not applicable: 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.4.6, 1.5.1.5, 1.5.5, 1.6, 1.7, 1.8, 1.9, 1.10.4 through 1.10.7, 1.10.9, 1.11, 1.13, 1.14.5, 1.17.7 through 1.17.9, 1.19.1, 1.19.3, 1.20, 1.21, 1.23.7, 1.24, 1.25.1 through 1.25.5, 1.26.4, 2.3, 2.4, 2.8 through 2.10.

Specification for the Design of Cold-Formed Steel Structural Members—AISI–1996.

Specification for the Design of Cold-Formed Stainless Steel Structural Members—SEI/ASCE 8–02, 2002.

Standard Specifications Load Tables and Weight Tables for Steel Joists and Joist Girders, SJI, Fortieth Edition, 1994.

Structural Applications of Steel Cables for Buildings—ASCE19, 1996.

Standard Specification for Strapping, Flat Steel and Seals—ASTM D3953, 1991.

Wood and Wood Products

Basic Hardboard—ANSI/AHA A135.4–1995.

Prefinished Hardboard Paneling—ANSI/AHA A135.5–1995.

Hardboard Siding—ANSI/AHA A135.6–1998.

American National Standard for Hardwood and Decorative Plywood—ANSI/HPVA HP–1–1994 (Approved 1995).

Structural Design Guide for Hardwood Plywood Wall Panels—HPVA Design Guide HP–SG–96, 1996.

For wood products—Structural Glued Laminated Timber—ANSI/AITC A190.1–1992.

Construction and Industrial Plywood (With Typical APA Trademarks)—PS 1–95.

APA Design/Construction Guide, Residential and Commercial—APA E30-P–1996.

Design Specifications for Metal Plate and Wood Connected Trusses—TPI–85.

Design and Fabrication of All-Plywood Beams—APA H–815E (PDS Supplement #5), 1995.

Panel Design Specification—APA D410A, 2004.

Design and Fabrication of Glued Plywood-Lumber Beams—APA–S 812Q, Suppl. 2–1992.

Design and Fabrication of Plywood Curved Panels—APA–S 811M, Suppl. 1, 1990.

Design and Fabrication of Plywood Sandwich Panels—APA–U 814H, Suppl. 4, 1990.

Voluntary Product Standard, Performance Standard for Wood-based Structural Use Panels—PS 2–92, 1992 (also known as NIST Standard PS 2–96).