

**301.3 Alternative Engineered Design.**

**301.3.1 Design Criteria.** An alternative engineered design shall conform to the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability, and safety. Materials, equipment, or components shall be designed and installed in accordance with the manufacturer's installation instructions.

**301.3.2 Permit Application.** The registered professional engineer shall indicate on the design documents that the plumbing system, or parts thereof, is an alternative engineered design so that it is noted on the construction permit application. The permit and permanent permit records shall indicate that an alternative engineered design is part of the approved installation.

**301.3.3 Technical Data.** The registered professional engineer shall submit sufficient technical data to substantiate the proposed alternative engineered design and to prove that the performance meets the intent of this code.

**301.3.4 Design Documents.** The registered professional engineer shall provide two complete sets of signed and sealed design documents for the alternative engineered design for submittal to the Authority Having Jurisdiction. The design documents shall include floor plans and a riser diagram of the work. When appropriate, the design documents shall indicate the direction of flow, pipe sizes, grade of horizontal piping, loading, and location of fixtures and appliances.

**301.3.5 Design Approval.** When the Authority Having Jurisdiction determines that the alternative engineered design conforms to the intent of this code, the plumbing system shall be approved. If the alternative engineered design is not approved, the Authority Having Jurisdiction shall notify the registered professional engineer in writing, stating the reasons therefore.

**301.3.6 Inspection and Testing.** The alternative engineered design shall be tested and inspected in accordance with the submitted testing and inspection plan and the requirements of this code.

**302.0 Disposal of Liquid Waste.**

It shall be unacceptable for any person to cause, suffer, or permit the disposal of sewage, human excrement, or other liquid wastes, in any place or manner, except through and by means of an approved drainage system, installed and maintained in accordance with the provisions of this code.

**303.0 Connections to Plumbing System Required.**

Plumbing fixtures, drains, appurtenances, and appliances, used to receive or discharge liquid wastes or sewage, shall be connected properly to the drainage system of the building or premises in accordance with the requirements of this code.

**304.0 Sewers Required.**

**304.1** Every building in which plumbing fixtures are installed shall have a connection to a public or private sewer except as provided in Section 304.2.

**304.2** When a public sewer is not available for use, drainage piping from buildings and premises shall be connected to an approved private sewage disposal system.

**304.3** In cities and/or counties where the installation of building sewers is under the jurisdiction of a department other than the Authority Having Jurisdiction, the provisions of this code relating to building sewers need not apply.

**305.0 Damage to Drainage System or Public Sewer.**

**305.1** It shall be unacceptable for any person to deposit, by any means whatsoever, into any plumbing fixture, floor drain, interceptor, sump, receptor, or device, which is connected to any drainage system, public sewer, private sewer, septic tank, or cesspool; any ashes, cinders, solids, rags; inflammable, poisonous, or explosive liquids or gases; oils, grease, or any other thing whatsoever that would, or could, cause damage to the drainage system or public sewer.

**305.2** Roofs, inner courts, vent shafts, light wells, or similar areas having a rainwater drain, shall discharge to the outside of the building or to the gutter and shall not be connected to the sanitary drainage system unless first approved by the Authority Having Jurisdiction.

**306.0 Industrial Wastes.**

**306.1** Wastes detrimental to the public sewer system or detrimental to the functioning of the sewage treatment plant shall be treated and disposed of as found necessary and directed by the Authority Having Jurisdiction.

**306.2** Sewage or other waste from a plumbing system that are deleterious to surface or subsurface waters shall not be discharged into the ground or into any waterway unless it has first been rendered safe by some acceptable form of treatment as required by the Authority Having Jurisdiction.