APPENDIX H

ALTERNATE PLUMBING SYSTEMS

H 1.0 Scope.

H 1.1 The intent of this appendix is to provide clarification of procedures for the design and approval of engineered plumbing systems, alternate materials, and equipment not specifically covered in other parts of the code.

H 1.2 The provisions of this appendix apply to the design, installation, and inspection of an engineered plumbing system, alternate material, and equipment.

H 1.3 The Authority Having Jurisdiction has the right to require descriptive details of an engineered plumbing system, alternate material, or equipment including pertinent technical data to be filed.

H 1.4 Components, materials, and equipment must conform to standards and specifications listed in Table 14-1 or equivalent International Standard(s) approved by the Authority Having Jurisdiction of this code and other national consensus standards applicable to plumbing systems and materials.

H 1.5 Where such standards and specifications are not available, alternate materials and equipment must be approved in accordance with Section 301.2 of this code.

H 2.0 Engineered Plumbing Systems.

H 2.1 Definition. An engineered plumbing system is a system designed for a specific building project with drawings and specifications indicating plumbing materials to be installed, all as prepared by a person registered or licensed to perform plumbing design work.

H 2.2 Inspection and Installation. In other than one- and two-family dwellings, the designer of the system is to provide periodic inspection of the installation on a schedule found suitable to the Authority Having Jurisdiction. Prior to the final approval, the designer must verify to the Authority Having Jurisdiction that the installation is in compliance with the approved plans, specifications, and data and such amendments thereto. The designer must also certify to the Authority Having Jurisdiction that the installation is in compliance with the applicable engineered design criteria.

H 2.3 Owner Information. The designer of the system must provide the building owner with information concerning the system, considerations applicable for any subsequent modifications to the system, and maintenance requirements as applicable.

H 3.0 Water Heat Exchangers.

H 3.1 Heat exchangers used for heat transfer, heat recovery, or solar heating shall protect the potable water system from being contaminated by the heat-transfer medium.

H 3.2 Single-wall heat exchangers shall be permitted if they satisfy all of the following requirements:

(1) The heat-transfer medium is either potable water or contains essentially nontoxic transfer fluids having a toxicity rating or class 1 (see Section 207.0).

(2) The pressure of the heat-transfer medium is maintained at less than the average minimum operating pressure of the potable water system.

Exception: Steam complying with Section L 3.2 (1) above.

(3) The equipment is permanently labeled to indicate that only additives recognized as safe by the Authority Having Jurisdiction shall be used in the heat-transfer medium.

H 3.3 Other heat exchanger designs shall be permitted where approved by the Authority Having Jurisdiction.

H 4.0 Fixture Unit Values for Private or Private Use Bathroom Groups.

H 4.1 Tables L-1 and L-2 reflect the fixture unit loads for the fixtures in bathrooms as groups, rather than as individual fixtures. Such fixtures include water closets, lavatories, and bathtubs or showers. The tables reflect diversity in the use of fixtures within a bathroom and between multiple bathrooms.

H 4.2 The listed water supply fixture unit values in Table L-1 reflect the load of entire bathroom groups on the cold-water service. Individual hot and cold water branch piping to the fixtures should be sized according to Chapter 6 and Appendix A.

H 4.3 The listed drainage fixture unit values in Table L-2 reflect the load of entire bathroom groups on the sanitary drainage system. Where fixtures within bathrooms connect to different branches of the drainage system, the fixture unit values for the individual fixtures shall be used, as listed in Table 7-3 of this code.

H 5.0 Drainage System Sizing.

H 5.1 Drainage Fixture Units. Drainage fixture unit values shall be sized in accordance with Table 7–3 and Section 702.0.

H 5.2 Size of Building Drain and Building Sewer. The maximum number of drainage fixture units allowed on the building drain or building sewer of a given size shall be in accordance with Table L-3. The