ASSE Standard #1006-1986
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American Society of Sanitary Engineering

Performance Requirements for

Residential Use Dishwashers

General Information

Although this Standard may be used as a benchmark for in-house evaluation, no product may be said to be A.S.S.E. approved unless the manufacturer has applied to the A.S.S.E., has had his product tested by an official A.S.S.E. recognized independent laboratory, according to the applicable A.S.S.E. Standard, and when the product has passed the test, displays the A.S.S.E. Seal on the product. Instructions for receiving the authorization to display the Seal are available from the A.S.S.E. Central Office.

It is recommended that all devices designed for plumbing systems, especially those which pertain to public health and safety, should be installed consistent with local codes by qualified and trained professionals.

American Society of Sanitary Engineering
Bay Village, Ohio

Foreword

The development of this sanitation performance standard was prompted by awareness that public health can be affected by the connection of domestic appliances to the domestic water supply and sanitary drainage systems.

This provides a basis for evaluating the adequacy of appliance design and performance to insure sanitary conditions and to protect the public from health hazards that could result from improper design or manufacture.

The performance criteria presented are based on extensive engineering research and broad field experience on protection of the potable water supply and safe discharge of wastes into the sanitary plumbing system. Engineers and technicians representing manufacturer's, public health officials, plumbing contractors, inspection agencies and plumbing testing laboratories contributed the technical expertise and experience necessary to develop a meaningful and scientifically sound evaluation method that takes into account conditions that could adversely affect the sanitary performance of these appliances.

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Residential Use Dishwashers

Section I

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1.1 Scope

This standard applies to residential use (household) type dishwashers, both front loading and top loading, requiring connection to the potable water supply and discharging into the plumbing drainage system.

1.2 Purpose

The purpose of this standard is to supply manufacturers, plumbing enforcement agencies and others with criteria for performance of the appliance when connected to a system of plumbing and the methods of test for determining that performance.

1.3 General Requirements

1.3.1 Machine Inspection

All parts of the potable water supply assembly of the dishwasher through the discharge terminal point of the air gap fitting, or other backflow preventer, shall be of non-toxic, corrosion resisting materials consistent with plumbing practices. Harmful substances shall not be imparted to articles processed by the dishwasher from materials used in its construction. (See 2.2)

1.3.2 Flushing Means

The dishwasher shall provide a means of automatic flushing of all surfaces exposed to wash water and an automatic means of removing residual liquid except for that remaining in the sump, discharge conduits and pump. (See 2.3.1)

1.3.3 Soil Accumulation

The washing chamber and all components within it shall be designed to minimize the accumulation of soil. (Exceptions are screens, filter, etc., specifically designed for retention and subsequent removal of soil.) (See 2.3.1)

1.3.4 Air Gaps

Potable water supplies to the unit shall be protected against contamination by means of air gaps or other acceptable devices. This requirement applies to the supplying of potable water to all accessories such as dispensers and injectors as well as the washing machine.

1.3.5 Water Supply Systems

The water supply system as supplied with the dishwasher shall be designed to operate without malfunction when connected to a water system at a static pressure of 861.9 kPa (125 p.s.i.) and a temperature of 71.1°C (160°F). Portions of the system subjected to cold water only, where applicable, shall be tested at 37.8°C (100°F). (See 2.3.1)