

ASSE/IAPMO/ANSI Series 17000

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American Society of Sanitary Engineering

Professional Qualifications Standard for the

Mechanical Inspector

An American National Standard

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Professional Qualifications Standard for the Mechanical Inspector

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Westlake, Ohio
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FOREWORD

Professional Qualifications Standard for the Mechanical Inspector

This foreword shall not be considered part of the standard. However, it is offered to provide background information.

In 1987, the American Society of Sanitary Engineering's Board of Directors recognized the need to develop Professional Qualifications Standards for the plumbing and mechanical industry. Since that time, ASSE has developed a number of Professional Qualifications Standards, including the Series 5000, *Cross-Connection Control Professional Qualifications Standard*, and the Series 6000, *Professional Qualifications Standard for Medical Gas Systems Personnel*. Both of these important documents, now each considered the industry standard, were necessary to allow the Authority Having Jurisdiction to have nationally recognized standards, developed in an open consensus process by all industry stakeholders, to use in ensuring that individuals working on these critically important systems possess the knowledge and experience required to successfully perform the installation, testing, maintenance and inspection needed within our industry.

With the development of the ASSE/IAPMO/ANSI Series 17000, *Professional Qualifications Standard for the Mechanical Inspector*, and its companion document, the ASSE Series 16000, *Professional Qualifications Standard for the Plumbing Inspector*, the Society is again leading the way and raising the bar for the plumbing and mechanical industry. For the first time, these important new standards spell out the experience, education, training and general knowledge requirements for inspectors who play a critical role in protecting the health and safety of both the general public and the industry itself.

Our ever changing industry is affected by innovation with the constant development of new materials, systems and installation methods. The economy also plays a large role in funding for education of public inspectors and the move toward third-party and multi-craft inspectors. With these industry developments, it was essential that a national standard for mechanical inspectors be developed. That need has been fulfilled with the ASSE/IAPMO/ANSI Series 17000.

Recognition is made of the time volunteered by members of this working group and of the industry members who participated in the development of this standard.

Compliance with this standard does not imply acceptance by any code body or Authority Having Jurisdiction.

This voluntary consensus standard was promulgated in accordance with procedures developed by the American National Standards Institute (ANSI).

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Professional Qualifications Standard for the Mechanical Inspector

10-1.1 Scope

This standard applies to an individual who inspects mechanical systems.

10-1.2 Purpose

The purpose of this standard is to provide minimum performance criteria, identified by industry consensus, for Mechanical System Inspectors (“herein referred to as the “Inspector”).

10-1.3 Limitations

This standard applies to individuals seeking Mechanical Inspector Certification only.

10-1.4 Reference and Industry Standards

Appendix A includes the referenced standards in the model mechanical codes.

10-2.1 General Knowledge

10-2.1.1 The Inspector shall be able to identify and show knowledge of the applicable laws, codes, rules, listing agencies and regulations from the federal, state and local levels pertaining to mechanical systems and ASSE Series 17000.

10-2.1.2 The Inspector shall be able to identify and describe the basic concepts pertaining to:

- a. Administration and general regulations
- b. Chimneys and vents
- c. Combustion air
- d. Commercial hoods and kitchen ventilation
- e. Duct systems
- f. Environment air ducts and product conveying systems
- g. Exhaust systems
- h. Fuel gas piping
- i. Hydronic systems
- j. Installation of specific appliances

- k. Process piping
- l. Refrigeration systems
- m. Job site safety requirements
- n. Steam and hot water boilers
- o. Ventilation and air supply

10-2.2 Product Performance Knowledge

10-2.2.1 The Inspector shall be able to identify approved mechanical products and materials.

10-2.2.2 The Inspector shall be able to identify components of mechanical systems.

10-2.2.3 The Inspector shall be able to identify and describe the operating principles and performance characteristics of mechanical systems; and demonstrate knowledge of the following components:

- a. Appliances and equipment
- b. Chimneys and vents
- c. Duct systems
- d. Exhaust systems
- e. Fuel piping
- f. Hangers and supports
- g. Refrigeration systems
- h. Steam and hot water boilers and safety components

10-2.3 Product Installation Knowledge

10-2.3.1 The Inspector shall be able to identify and describe the proper installation requirements for the mechanical systems pertaining to:

- a. Applicable governmental requirements
- b. Applicable mechanical codes and standards
- c. Manufacturer’s installation instructions

10-2.4 System Knowledge

10-2.4.1 The Inspector shall be able to identify and describe the appropriate installation of the following: