ASSE/IAPMO/ANSI Series 5000

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ASSE International

Cross-Connection Control Professional Qualifications Standard

An American National Standard

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FOREWORD

Cross-Connection Control Professional Qualifications Standard

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

ASSE International professional qualifications standards are developed in the interest of consumer safety.

In 1987, ASSE's Board of Directors recognized the need to develop a professional qualifications standard for individuals involved with backflow prevention. The resulting qualifications standard, the ASSE Series 5000, established minimum industry requirements for the backflow prevention assembly tester, backflow prevention assembly repairer and cross-connection control surveyor. This voluntary consensus standard was the first in the plumbing and water supply fields to set minimum requirements for qualified professional. The Series 5000 was first issued by the ASSE Board of Directors in 1990 and was designated as an American National Standard by the American National Standards Institute (ANSI) on November 14, 1991. The standard series has been updated and revised in 1998, 2000, 2004 and 2009, with the current revision released in 2015.

Backflow prevention methods, devices and assemblies, along with their selection, installation, testing and repair, have been an important part of protecting the public health and the water supply for many years. With the growing use of recycled or gray water systems, and the chronic shortage of water in some areas of the country and world, it is vital that this important resource be protected. There is no understating the importance of requiring trained personnel to specify, install, test and repair this critical protection – the ASSE/IAPMO/ANSI Series 5000 standards mandate the proper level of training, testing and experience needed. To prepare, update and revise this standard, representatives from different regions and industry segments dedicated themselves to achieving true consensus, thereby advancing the backflow prevention community.

In order to better meet the needs of the industry, this revised standard defines the minimum requirements for testing backflow prevention assemblies meeting the performance requirements of ASSE Standards 1013, 1015, 1020, 1047, 1048 and 1056, and the minimum qualifications requirements for becoming an ASSE Certified Backflow Prevention Assembly Tester, Fire Protection System Cross-Connection Control Tester, Backflow Prevention Assembly Repairer, Cross-Connection Control Surveyor, and Backflow Prevention Program Administrator. This 2015 revision has added Standard #5063, *Minimum Performance Requirements for Testing Air Valve and Vent Inflow Preventers.*

Recognition is made of the time volunteered by members of the working group, the original qualifications standards committee members, and of the industry members who participated in the previous revisions of this standard.

Compliance with this standard does not imply acceptance by any code body. It is recommended that all cross-connection control professionals be in compliance with federal, state and local codes.

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

ASSE PQ STANDARDS COMMITTEE

Cross-Connection Control Professional Qualifications Standard

Donald Summers Jr., Chairperson
UA Local 562
St. Louis, MO

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UA Local 68 JAC
Houston, TX

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United Association
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UA Local 597
Mokena, IL

Dana Colombo
National Inspection Testing & Certification (NITC)
Metairie, LA

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UA Local 68 JAC
Houston, TX

Edward Lyczko
Cleveland Clinic - Retiree
Cleveland, OH

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IAPMO
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UA Local 78
Los Angeles, CA

Barry Pines, CPD
C & R Plumbing
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Plumbing Code & Design Consulting
Butte, MT

Philip Roach
Mazzetti
Portland, OR

Kenneth Schneider
United Association ITF
St Louis, MO

Jason Shank
UA Local 55
Cleveland, OH

Jaime Valdivia
National Inspection Testing & Certification (NITC)
Los Angeles, CA

Marianne Waickman (non-voting)
ASSE International
Mokena, IL

ASSE SERIES 5000 WORKING GROUP

Cross-Connection Control Professional Qualifications Standard

Sean Cleary, Chairperson
IAPMO/BPI
Scranton, PA

Stuart Asay
IAPMO/BPI
Westminster, CO

Nick Azmo
Azmo Mechanical
Piscataway, NJ

Paul A. Baker
PITC & UA Local 98
Detroit, MI

John Ballun
Val-Matic Valve
Elmhurst, IL

Gary Bittner
UA Local Union 669 Road Sprinkler Fitters
Somerset, PA

Mike Eisenhauer
Chicago Backflow, Inc.
Alsip, IL

Joseph Kajak
Palm Beach County
Boynton Beach, FL

Matthew Kapcia
City of Troy
Troy, MI

Kenneth J. Kerr
Kerr Marketing
Richfield, OH

Matthew King
Berwick, PA

Gary Koenig
Sprinkler Fitters UA Local 696
Milburn, NJ

Mike Lueck
Mid-West Instrument
Sterling Heights, MI

John A. Parizek
Minneapolis Plumbers JJATC
Minneapolis, MN

Paul Patterson
Hydro Designs, Inc
Troy, MI

Barry Pines, CPD
C & R Plumbing
Shelby Township, MI

John Robinson
UA Local 68 JAC
Houston, TX

Kenneth Schneider
United Association ITF
St. Louis, MO

Donald Summers Jr.
UA Local 562
St. Louis, MO

Thomas F. Walsh
NJ Alliance of Master Plumbers
Jackson, NJ

Kenneth Whitson
UA Local 344 Plumbers & Pipefitters Training Center
Oklahoma City, OK

Marianne Waickman (non-voting)
ASSE International
Mokena, IL

Ralph Yanora
PAWSC
Pittston, PA

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Minimum Performance Requirements for Testing Reduced Pressure Principle Backflow Preventers (RP) and Reduced Pressure Principle Fire Protection Backflow Preventers (RPF)

1.0 Scope, Purpose and Definitions

1.1 Scope

This operational performance test requirement includes all activities that shall be addressed while field testing ASSE Standard 1013 Reduced Pressure Principle Backflow Preventers (RP) and Reduced Pressure Principle Fire Protection Backflow Preventers (RPF).

1.2 Purpose

The purpose of this standard shall be to establish minimum field testing performance requirements for ASSE Standard 1013 Reduced Pressure Principle Backflow Preventers (RP) and Reduced Pressure Principle Fire Protection Backflow Preventers (RPF).

1.3 Definitions

Field Testing Performance Requirement: A test procedure that evaluates a backflow prevention assembly for compliance to the minimum performance requirements.

Refer to Appendix G for additional definitions.

2.0 Field Testing Requirements

At a minimum, backflow prevention assemblies shall be tested upon installation, annually and immediately after repair or when returned to service. The test shall be performed by a trained and certified backflow tester meeting the requirements of the 5110 standard.

2.1 Administrative Issues

A. Initial arrangements shall be made with the responsible party to schedule the test.

B. Arrangements/notifications shall be made where a continuous water supply is necessary or where testing creates a special hazard, inconvenience or risk in buildings or piping systems.

C. The proper information, reporting forms and equipment shall be gathered to properly perform the test.

2.2 Site Issues

A. Safety Evaluation

The evaluation shall be made for hazards to persons and property in accordance with applicable federal, state and local safety regulations and statutes. Some of the issues to be examined are, but are not limited to:

- Confined spaces – access, atmosphere
- Chemical, electrical or flammable hazards
- Hazards related to elevation
- Excessive noise

B. Evaluation of the Installation

1. The assembly shall be confirmed for code compliance with respect to the degree of hazard, markings, prohibited locations (i.e. where subjected to flooding, freezing, toxic fumes) and special installation requirements.
2. The assembly orientation and direction of flow shall be confirmed as proper.
3. The assembly shall be checked for alterations or special needs, such as, but not limited to, the adequacy of the air gap, the evidence of illegal bypasses and the adequacy of drainage systems from the assembly.
4. The general appearance of the assembly shall be checked for evidence of excessive discharge, condition of shutoff valves, test cocks, relief valve and air gap, and adequacy of drainage, should leakage occur.