

American Society of Sanitary Engineering

Cross-Connection Control Professional Qualifications Standard

An American National Standard

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GENERAL INFORMATION

Cross-Connection Control

Professional Qualifications Standard

Neither this standard, nor any portion thereof, may be reproduced without the written consent of the American Society of Sanitary Engineering.

Organizations wishing to adopt or list any ASSE Standard should print the ASSE Standard Number on the cover page first and in equal or larger type to that of the adopting or listing organization.

American Society of Sanitary Engineering

Westlake, Ohio

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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 Professional Qualification Standards are developed in the interest of consumer safety.

During its April, 1987 meeting the ASSE Board of Directors recognized a plumbing industry need and voted to develop Professional Qualification Standards for individuals involved with backflow prevention. Like the ASSE product performance standards, this qualification standard 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 a qualified professional. This standard was first issued by the ASSE Board of Directors in 1990 and was ANSI approved as an American National Standard on November 14, 1991. This standard has been updated and revised in 1998, 2000, 2004, with the current revision released in 2009. The 2009 revision has added two new standards to reflect the changing needs and requirements of the industry. The 5140 Fire Sprinkler System Cross-Connection Control Tester Professional Qualification standard, and the 5150 Backflow Prevention Program Administrator Professional Qualification standard were developed to meet the needs of our ever changing industry and world.

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 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 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 achieve a true consensus, and thereby advancing the backflow prevention community.

In order to better meet the needs of the industry, this revised standard defines the minimum performance requirements for the testing of backflow preventers meeting the requirements of ASSE Standards 1013, 1015, 1020, 1047, 1048, 1052 or 1056 and the minimum performance requirements to be ASSE certified as a backflow prevention assembly tester, a fire sprinkler system cross-connection control tester, a backflow prevention assembly repairer, a cross-connection control surveyor, and a backflow prevention program administrator.

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

2009 PROFESSIONAL QUALIFICATIONS STANDARDS COMMITTEE

Cross-Connection Control Professional Qualifications Standard

Don Summers

*Professional Qualifications Standards Committee
Chairman
Plumbers & Pipefitters Local 562
St. Louis, Missouri*

Rand Ackroyd

*Rand Technical Consulting, LLC
Newburyport, Massachusetts*

Paul Bladdick

*LPB Co, Inc.
White Lake, Michigan*

Sean Cleary

*LAPMO
Scranton, Pennsylvania*

Laurence Coleman

*Pipefitters LU 597 Training Fund
Mokena, Illinois*

Robert Cross

*Houston Area Plumbing JAC, Plumbers 68
Houston, Texas*

Joseph Fugelo

*The Labov Co. Wholesale Dist. P & H
Philadelphia, Pennsylvania*

Scott Hamilton

*Plumbers LU 75 Education Fund
Milwaukee, Wisconsin*

Steven Hazzard

*ASSE Staff Engineer
Westlake, Ohio*

Les Kendall

*UA Canada
Dundas, Ontario*

Edward Lyczko

*Cleveland Clinic Foundation
Cleveland, Ohio*

Jerry McManus

*National ITC
Mandeville, Louisiana*

Ron Murray

*UA Local 290
Portland, Oregon*

Barry Pines, CPD

*C & R Plumbing
Shelby Township, Michigan*

Anthony Rini III, PE

*Mottola Rini Engineers PC
New York, New York*

Carl Triphahn

*PIPE
Tempe, Arizona*

Marianne Waickman

*ASSE Prof. Qualifications Coordinator
Westlake, Ohio*

ASSE SERIES 5000 WORKING GROUP

Cross-Connection Control

Professional Qualifications Standard

Sean Cleary

*Working Group Chairman
LAPMO
Scranton, Pennsylvania*

Rand Ackroyd

*Rand Technical Consulting, LLC
Newburyport, Massachusetts*

Courtney Arford

*Douglas County Govt.
Douglas County, Colorado*

Stu Asay

*LAPMO/BPI
Northglenn, Colorado*

Jim Bickford

*City of Pompano Beach
Pompano Beach, Florida*

Paul Bladdick

*LPB Co, Inc.
White Lake, Michigan*

Gunnar O. Collins

*Collins Backflow Specialists, Inc.
Palatine, Illinois*

Robert Cross

*Houston Area Plumbing Joint
Apprenticeship Committee
Houston, Texas*

Herman Delfosse

*Wisconsin Dept. of Commerce
Shanno, Wisconsin*

Joseph Hallman

*All City Backflow Prevention
Maple Heights, Ohio*

Julie Howell

*Apollo Valves/Conbraco Ind.
Pageland, South Carolina*

Joseph Kajak, Jr.

*Palm Beach County Plumbing Inspector
Boynton Beach, Florida*

William Keene, Jr.

*Director of Training, Local 630 JATC
West Palm Beach, Florida*

Kenneth Kerr

*ABPA
Brunswick, Ohio*

Matthew King III

*NE Pennsylvania Chapter
Berwick, Pennsylvania*

Larry La Bute

*Hydro Designs, Inc.
Troy, Michigan*

James Lake

*NFPA
Quincy, Massachusetts*

Michael Lueck

*Mid-West Instrument
Sterling Heights, Michigan*

Joseph Mathews

*Sprinkler Fitters #692 JATC
Philadelphia, PA*

Brad Noll

*Wilkins, Div. of Zurn
Paso Robles, CA*

John Robinson

*UA Local #68
Houston, Texas*

Kenneth Schneider

*Sprinkler Fitters Local 268 JATC
St. Louis, Missouri*

Carl G. Schroeder

*Director of Training- Plumbing
Industry Training Center
Detroit, Michigan*

Donald Summers, Jr.

*Plumber's and Pipefitter's Local #562
St. Louis, Missouri*

Ralph Yanora

*PAWSC
Pittston, Pennsylvania*

Marianne Waickman

*ASSE
Professional Qualifications Coordinator
Westlake, Ohio*

CROSS CONNECTION CONTROL TECHNICAL (CCCT) COMMITTEE

Cross-Connection Control Professional Qualifications Standard

Sean Cleary

*CCCT Committee Chairman
LAPMO
Scranton, Pennsylvania*

Stu Asay

*LAPMO/BPI
Northglenn, Colorado*

Jim Bickford

*City of Pompano Beach
Pompano Beach, Florida*

Paul Bladdick

*LPB Co, Inc.
White Lake, Michigan*

Bernie Clarke

*Clarke Sales
Valencia, California*

Robert Cross

*Houston Area Plumbing Joint
Apprenticeship Committee
Houston, Texas*

Joseph Kajak, Jr.

*Palm Beach County Plumbing Inspector
Boynton Beach, Florida*

William Keene, Jr.

*Director of Training, Local 630 JATC
West Palm Beach, Florida*

Kenneth Kerr

*ABPA
Brunswick, Ohio*

Matthew King III

*NE Pennsylvania Chapter
Bernwick, Pennsylvania*

Gary Koenig

*Sprinkler Fitters Local #696
Milburn, NJ*

Kenneth Schneider

*Sprinkler Fitters Local 268 JATC
St. Louis, Missouri*

Donald Summers, Jr.

*Plumber's and Pipefitter's Local #562
St. Louis, Missouri*

Ralph Yanora

*PAWSC
Pittston, Pennsylvania*

Marianne Waickman

*ASSE
Professional Qualifications Coordinator
Westlake, Ohio*

ASSE SERIES 5000 • STANDARD #5013

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 which shall be addressed while field testing an ASSE Standard 1013 Reduced Pressure Principle Backflow Preventer (RP) & Reduced Pressure Fire Protection Principle Backflow Preventers (RPF).

1.2 Purpose

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

1.3 Definitions

Field inspection performance requirement – a test procedure which 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. The test shall be performed by a trained and certified backflow tester.

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 for 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 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

- Hazards to the tester and other persons
- 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 shut-off valves, test cocks, relief valve, air gap and adequacy of drainage should leakage occur.

3.0 Reporting

- A. The test report shall contain, but not be limited to, the following information: manufacturer's name, model number, serial number and size of assembly; owner's name and address; building address; physical location of assembly within the building (as descriptive as possible); description of application (i.e. equipment or system served); initial test results (pass-fail of first check and second check, relief valve discharge, static line pressure); test gauge manufacturer, model number, serial number and expiration date/last date of calibration; repairs made; repair parts used; cleaning performed; final test results, as applicable; printed name, signature and certification number of the tester/repairer; type of assembly, affirmation statement of assembly performance at the date and time of the test, comments relevant to discharge, improper installation/orientation, etc.
- B. The tester shall provide copies of the test results to the owner and other appropriate parties as required. The tester shall maintain a copy of the report for the records in accordance with the requirements of the authority having jurisdiction.