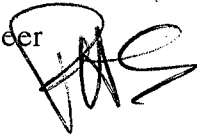


Foundation for
Cross-Connection
Control and
Hydraulic Research**To:** Manufacturers of backflow prevention assemblies**From:** Paul Schwartz, Chief Engineer **Date:** 21 June 2006**Subject:** Evaluation Policy 06-001RP - Static pressure drop – 1st Check

This memo is to notify the manufacturers of backflow prevention assemblies that the Foundation Engineering Staff will be adding clarification to Section 10.2.2.3.5 of the Manual of Cross-Connection Control – 9th Edition, which is the test to determine the static pressure drop across check valve No. 1 of a reduced pressure principle assemblies (RP).

Testing in the lab has shown that there may be inconsistent results of this test if the assembly has not experienced a sufficient rate of flow prior to starting the test. A sufficient rate of flow has been interpreted in the past as rated flow of the assembly, such that the check valves are caused to move to their open position, then reducing the rate of flow to zero allows the check valves to move to their normally closed position. This helps to assure that the check valves will locate properly.

Therefore, the attached clarification in Evaluation Policy 06-001 has been implemented effective 21 June 2006.

Should you require any additional information, please contact our Laboratory Staff.

06.138

Foundation for Cross-Connection Control and Hydraulic Research
University of Southern California

Manual of Cross-Connection Control - 9th Edition

Evaluation Policy 06-001
Issued 21 June 2006

Standard
for
Reduced Pressure Principle Assemblies (Section 10.2.2)

10.2.2.3.5

Purpose: To determine the static pressure drop across check valve No. 1.

Requirement: The static pressure drop across check valve No. 1 shall be at least 3.0 psi (20.7 KPa) greater than the pressure differential between inlet line pressure and the zone required to open the differential pressure relief valve, for all line pressures from 20 psi (137.8 KPa) up to maximum working water pressure (MWWP), but not less than 150 psi (1034.1 KPa).

Steps:

- a. With a differential pressure gage or manometer connected as in Section 10.2.2.3.3, flow a sufficient amount of water (i.e., rated flow of assembly) through the No. 2 shutoff valve of the assembly to re-establish the normal pressure gradient across check valve No. 1. Record the static pressure differential across check valve No. 1.
- b. Repeat step *a* for each 10 psi (68.9 KPa) increment between 20 psi (137.8 KPa) and the maximum working water pressure (MWWP), but not less than 150 psi (1034.1 KPa) line pressure. For each additional increment, re-establishing the normal pressure gradient by flowing a sufficient amount of water through the differential pressure gage shall be permitted.
- c. Failure of the first check valve to maintain a static pressure differential of at least 3.0 psi (20.7 KPa) greater than the differential pressure relief valve opening point at the corresponding line pressure, shall be cause for rejection.