SECTION 22 11 19 – DOMESTIC WATER PIPING SPECIALTIES

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:
    a. Reduced pressure principle backflow preventers for domestic water systems.

1.2 REFERENCES

A. ASSE 1013 – Performance requirements for reduced pressure principle assemblies
B. CSA B64.4 – Backflow Preventers
C. AWWA C511 – RP Assemblies
D. NSF/ANSI/CAN 61 and 372
E. cUPC® Listed
F. UL® and C-UL® Classified
G. USC Foundation for Cross Connection Control and Hydraulic Research

1.3 SUBMITTALS

A. Product Data: Manufacturer's literature including performance, dimensions, materials, and installation.
B. Operation and Maintenance Data: Manufacturer's instructions for operation, maintenance, and repair kits.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum five years' experience with backflow prevention systems.
B. Regulatory Compliance: Conform to applicable plumbing codes and listing agencies.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver components in factory packaging with model identification.
B. Store in a clean, dry, protected location and protect from damage.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Wilkins by Zurn Elkay Water Solutions

2.2 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER

A. Basis of Design: Model 975XL2

B. Substitutions: Not permitted without prior written approval.

2.3 MATERIALS

A. Valve Body and Covers: Low Lead Cast Bronze, ASTM B584
B. Internals: Noryl™ Polymer
C. Elastomers: Silicone and Buna Nitrile (FDA Approved)
D. Springs and Fasteners: Stainless Steel, 300 Series
E. Ball Valve Handles: Stainless Steel
F. End Connections: Threaded, ANSI B1.20.1

2.4 PERFORMANCE

A. Maximum Working Pressure: 175 psi
B. Maximum Temperature: 180°F
C. Hydrostatic Test Pressure: 350 psi

2.5 FEATURES

A. Sizes: 3/4", 1", 1-1/4", 1-1/2", 2"
B. Configurable with relief valve discharge sensor (suffix MS)
C. Suitable for horizontal installation
D. Certified to ASSE, NSF, CSA, UL, and USC standards

2.6 OPTIONS (Suffixes may be combined)

A. MS: Relief valve excessive discharge sensor
B. SE: Street elbows (3/4" & 1")
C. U: Union ball valves
D. FT: Integral SAE flare test fitting
E. S: Bronze “Y” type strainer

2.7 ACCESSORIES

A. Air Gap (Model AG)
B. Thermal Expansion Tank (Model XT)
C. Soft Seated Check Valve (Model 40XL2)
D. Shock Arrester (Model 1260XL)
E. Quick Test Fitting Set (QT-SET)
F. Relief Valve Monitoring Retrofit Kit (RFK-975XL2MS)

PART 3 – EXECUTION

3.1 INSTALLATION

A. Flush system inlet piping before installation
B. Install per manufacturer’s instructions and local codes.
C. Maintain 12" minimum and 30" maximum height above grade or floor.

D. Provide clearance for testing and maintenance.
E. Ensure drainage to prevent relief valve discharge flooding.

3.2 FIELD QUALITY CONTROL

A. Test assemblies as required by local authority and manufacturer guidelines.
B. Verify proper operation of check valves and relief valve.

3.3 CLEANING AND PROTECTION

A. Flush system before operation.
B. Protect assembly from freezing and damage during and after installation.

END OF SECTION