

## Evaluation Table

<b>PEP ID:</b>	XXXXX
<b>Manufacturer:</b>	<b>Name of Manufacturer</b>
<b>Product Name:</b>	<b>Name of Product</b>

800 Landscape Architectural Materials

808 Landscape Irrigation: Backflow Assemblies (Reduced Pressure Backflow Preventer)

ADOT Standard Specification: 808-2.01(A)

Responsible Section: Roadway Group

<b>Material Property</b>	<b>Specification/ Test Method</b>	<b>Requirement</b>	<b>Results</b>	<b>Pass/ Fail</b>
Backflow Prevention Unit: General	808-2.01(A)	Backflow prevention units shall be atmospheric, pressure or reduced pressure type.		
Backflow Prevention Unit: Testing	808-2.01(A)	All testing of backflow prevention devices shall be as specified by the Foundation for Cross Connection Control Research, U.S.C.		
Backflow Prevention Unit: Definition	808-2.01(A)	Atmospheric and pressure type units may also be referred to as atmospheric vacuum breaker or pressure vacuum breaker.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The reduced pressure backflow preventer shall consist of two independently operating check valves, an independent relief valve, resilient seat inlet and outlet, full port ball type shut-off valves and test cocks.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The unit shall be designed for installation in a normal horizontal flow attitude.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The independent relief valve shall be located between the two check valves.		

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The backflow preventer shall include an integral sensing system that will automatically open the relief valve whenever the pressure upstream of the first check valve drops below 3 pounds per square inch greater than the pressure in the zone between the two check valves.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The relief valve shall remain open until a positive pressure differential of 3 pounds per square inch is reestablished.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The sensing passage shall be located within the unit housing to protect against accidental damage or crimping.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	To assure maximum size passageway, snubber or other restrictive elements shall not be used.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	In the event that pressure upstream of the first check valve drops to atmosphere or below, the construction of the unit shall be such that during the normal operation of the device, the level of water in the zone between the two check valves shall be lowered to create within the unit an internal air gap which is greater than the diameter of the inlet pipe.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	Both check valves and the relief valve shall be spring loaded poppet type of modular design such that the complete assembly including valve, spring and seat may be removed and replaced using low cost replacement kits.		

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Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	All parts shall be made from corrosion resistant materials.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	The design shall place the sensing diaphragm and passage within the unit housing to eliminate danger of malfunction due to mechanical or vandalism damage.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	Construction of the backflow prevention unit shall be such that any minor leakage at the second check valve will result in a visible flow from the relief valve even if the first check valve is totally disabled.		
Reduced Pressure Backflow Preventer: Body	808-2.01(A)(3)	Bronze		
Reduced Pressure Backflow Preventer: Check Valve Enclosures	808-2.01(A)(3)	Glass Filled Noryl		
Reduced Pressure Backflow Preventer: Valve Disc	808-2.01(A)(3)	EPT Rubber		
Reduced Pressure Backflow Preventer: Diaphragm	808-2.01(A)(3)	Buna N and Nylon		
Reduced Pressure Backflow Preventer: "O" Rings	808-2.01(A)(3)	Buna N		
Reduced Pressure Backflow Preventer: Springs	808-2.01(A)(3)	Stainless Steel		
Reduced Pressure Backflow Preventer: Screws	808-2.01(A)(3)	Stainless Steel		
Reduced Pressure Backflow Preventer: Maximum Working Pressure	808-2.01(A)(3)	150 psi		

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Reduced Pressure Backflow Preventer: Hydrostatic Test Pressure	808-2.01(A)(3)	300 psi		
Reduced Pressure Backflow Preventer: Temperature Range	808-2.01(A)(3)	33 °F – 210 °F		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	Construction of the backflow prevention unit shall be such that any minor leakage at the second check valve will result in a visible flow from the relief valve even if the first check valve is totally disabled.		
Reduced Pressure Backflow Preventer: General	808-2.01(A)(3)	Each reduced pressure backflow preventer shall be factory assembled and tested prior to delivery.		