MHWSC

BACKFLOW PREVENTION ASSEMBLY TESTERS

(BPAT)

MHWSC requires **"three items"** from all BPATS that are testing, installing, maintaining, and replacing backflow prevention assemblies within our water systems.

1.) BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT.

Form TCEQ-20700 can be downloaded and printed off the TCEQ website or picked up at our Main Office at 4000 US Highway 281 Mercedes, Tx 78570. The form is intended to be completed on-site while testing is occurring with **blue ink** and signed by Licensed Tester that performed the work. **NOTE All INCOMPLETED (T&M Forms) WILL BE REJECTED**. The **hardcopy original** must be provided to the Public Water System (PWS) as specified in Title 30 of the Texas Administrative Code 290.44(h)(4)(c). **DO NOT EMAIL THIS FORM!**

2.) COPY OF CURRENT TCEQ BACKFLOW PREVENTION ASSEMBLY TESTER LICENCE

Only backflow prevention assembly testers who have been licensed by the TCEQ are authorized to test and repair assemblies on any domestic, commercial, industrial, or irrigation service in Texas.

3.) COPY OF TEST KIT CALABRAION CERTIFICATE

Separate gauges are required for testing potable and non-potable water lines. MHWSC must ensure that licensed backflow-prevention-assembly testers use gauges that are complying and have been tested for accuracy at least annually.

This packet contains all four (T&M Forms) MHWSC PWS ID#: 1080234 Progreso, MHWSC PWS ID#: 1080235 Weslaco, MHWSC PWS ID#: 1080067 Las Rusias, and MHWSC PWS ID#: 0310147 Del Mar Heights. All forms and corresponding documents must be delivered to our main office or mailed to Military Highway WSC, PO Box 250, Progreso TX 78579.

If you have any questions, feel free to contact me at (956) 565-2491 Monday-Friday from 8:00am-5:00pm.

Thank You,

Antonio Lopez Jr
Water Distribution Operator

Military Highway Water Supply Corporation
P.O. Box 250 • Progreso, Texas 78579
Phone (956) 565-2491 • Fax (956) 565-9471

This packet contains all four (T&M Forms)

MHWSC PWS ID#: 1080234 Progreso

MHWSC PWS ID#: 1080235 Weslaco

MHWSC PWS ID#: 1080067 Las Rusias

MHWSC PWS ID#: 0310147 Del Mar Heights

PLEASE CONTACT MHWSC TO VERIFY WHICH FORM TO USE AT (956) 565-2491!

Texas Commission on Environmental Quality

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for recordkeeping *purposes:

NAME OF PWS:	Military Highway Water Supply Corporation
PWS ID#:	1080067
PWS MAILING ADDRESS:	P.O. Box 250 Progreso, TX 78579
PWS CONTACT PERSON:	Antonio Lopez Jr.
ADDRESS OF SERVICE:	

The backflow prevention assembly detailed below has been tested and maintained as required by commission regulations and is certified to be operating within acceptable parameters.

TYPE OF BACKFLOW PREVENTION ASSEMBLY (BPA):				
☐	Reduced Pressure Principle (RPBA)	☐	Reduced Pressure Principle-Detector (RPBA-D)	Type II ☐
☐	Double Check Valve (DCVA)	☐	Double Check-Detector (DCVA-D)	Type II ☐
☐	Pressure Vacuum Breaker (PVB)	☐	Spill-Resistant Pressure Vacuum Breaker (SVB)	

Manufacturer:	Main:	Bypass:	Size:	Main:	Bypass:
Model Number:	Main:	Bypass:	BPA Location:		
Serial Number:	Main:	Bypass:	BPA Serves:		

Reason for test:	New ☐	Existing ☐	Replacement ☐	Old Model/Serial #		
Is the assembly installed in accordance with manufacturer recommendations and/or local codes?					☐ Yes	☐ No
Is the assembly installed on a non-potable water supply (auxiliary)?					☐ Yes	☐ No

TEST RESULT PASS ☐ FAIL ☐	Reduced Pressure Principle Assembly (RPBA)			Type II Assembly	PVB & SVB	
	DCVA		Relief Valve	Bypass Check	Air Inlet	Check Valve
	1st Check	2nd Check***				
Initial Test Date: Time:	Held at ____ psid Closed Tight ☐ Leaked ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐ Did it fully open (Yes ☐ /No ☐)	Held at ____ psid Leaked ☐
Repairs and Materials Used**	Main: Bypass:					
Test After Repair Date: Time:	Held at ____ psid Closed Tight ☐	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid

*** 2nd check: numeric reading required for DCVA only

Differential pressure gauge used:		Potable: ☐		Non-Potable: ☐	
Make/Model:		SN:		Date tested for accuracy :	

Remarks:	

Company Name:		Licensed Tester Name (Print/Type):	
Company Address:		Licensed Tester Name (Signature):	
Company Phone #:		BPAT License #	
		License Expiration Date:	

The above is certified to be true at the time of testing.

* TEST RECORDS MUST BE KEPT FOR AT LEAST THREE YEARS [30 TAC §290.46(B)]

** USE ONLY MANUFACTURER'S REPLACEMENT PARTS

Texas Commission on Environmental Quality

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for recordkeeping *purposes.

NAME OF PWS:	Military Highway Water Supply Corporation
PWS ID#:	1080234
PWS MAILING ADDRESS:	P.O. Box 250 Progreso, TX 78579
PWS CONTACT PERSON:	Antonio Lopez Jr.
ADDRESS OF SERVICE:	

The backflow prevention assembly detailed below has been tested and maintained as required by commission regulations and is certified to be operating within acceptable parameters.

TYPE OF BACKFLOW PREVENTION ASSEMBLY (BPA):				
☐	Reduced Pressure Principle (RPBA)	☐	Reduced Pressure Principle-Detector (RPBA-D)	Type II ☐
☐	Double Check Valve (DCVA)	☐	Double Check-Detector (DCVA-D)	Type II ☐
☐	Pressure Vacuum Breaker (PVB)	☐	Spill-Resistant Pressure Vacuum Breaker (SVB)	

Manufacturer:	Main:	Bypass:	Size:	Main:	Bypass:
Model Number:	Main:	Bypass:	BPA Location:		
Serial Number:	Main:	Bypass:	BPA Serves:		

Reason for test:	New ☐	Existing ☐	Replacement ☐	Old Model/Serial #			
Is the assembly installed in accordance with manufacturer recommendations and/or local codes?					☐ Yes	☐ No	
Is the assembly installed on a non-potable water supply (auxiliary)?					☐ Yes	☐ No	

TEST RESULT PASS ☐ FAIL ☐	Reduced Pressure Principle Assembly (RPBA)			Type II Assembly	PVB & SVB	
	DCVA		Relief Valve	Bypass Check	Air Inlet	Check Valve
	1st Check	2nd Check***				
Initial Test Date: Time:	Held at ____ psid Closed Tight ☐ Leaked ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐ Did it fully open (Yes ☐ /No ☐)	Held at ____ psid Leaked ☐
Repairs and Materials Used**	Main: Bypass:					
Test After Repair Date: Time:	Held at ____ psid Closed Tight ☐	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid

*** 2nd check: numeric reading required for DCVA only

Differential pressure gauge used:			Potable: ☐	Non-Potable: ☐	
Make/Model:		SN:		Date tested for accuracy :	

Remarks:

Company Name:		Licensed Tester Name (Print/Type):	
Company Address:		Licensed Tester Name (Signature):	
Company Phone #:		BPAT License #	
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NAME OF PWS:	Military Highway Water Supply Corporation
PWS ID#:	1080235
PWS MAILING ADDRESS:	P.O. Box 250 Progreso, TX 78579
PWS CONTACT PERSON:	Antonio Lopez Jr.
ADDRESS OF SERVICE:	

The backflow prevention assembly detailed below has been tested and maintained as required by commission regulations and is certified to be operating within acceptable parameters.

TYPE OF BACKFLOW PREVENTION ASSEMBLY (BPA):				
☐	Reduced Pressure Principle (RPBA)	☐	Reduced Pressure Principle-Detector (RPBA-D)	Type II ☐
☐	Double Check Valve (DCVA)	☐	Double Check-Detector (DCVA-D)	Type II ☐
☐	Pressure Vacuum Breaker (PVB)	☐	Spill-Resistant Pressure Vacuum Breaker (SVB)	

Manufacturer:	Main:	Bypass:	Size:	Main:	Bypass:
Model Number:	Main:	Bypass:	BPA Location:		
Serial Number:	Main:	Bypass:	BPA Serves:		

Reason for test:	New ☐	Existing ☐	Replacement ☐	Old Model/Serial #			
Is the assembly installed in accordance with manufacturer recommendations and/or local codes?					☐ Yes	☐ No	
Is the assembly installed on a non-potable water supply (auxiliary)?					☐ Yes	☐ No	

TEST RESULT PASS ☐ FAIL ☐	Reduced Pressure Principle Assembly (RPBA)			Type II Assembly	PVB & SVB	
	DCVA		Relief Valve	Bypass Check	Air Inlet	Check Valve
	1st Check	2nd Check***				
Initial Test Date: Time:	Held at ____ psid Closed Tight ☐ Leaked ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐ Did it fully open (Yes ☐ /No ☐)	Held at ____ psid Leaked ☐
Repairs and Materials Used**	Main: Bypass:					
Test After Repair Date: Time:	Held at ____ psid Closed Tight ☐	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid

*** 2nd check: numeric reading required for DCVA only

Differential pressure gauge used:			Potable: ☐	Non-Potable: ☐	
Make/Model:		SN:		Date tested for accuracy :	

Remarks:

Company Name:		Licensed Tester Name (Print/Type):	
Company Address:		Licensed Tester Name (Signature):	
Company Phone #:		BPAT License #	
		License Expiration Date:	

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Texas Commission on Environmental Quality

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for recordkeeping *purposes.

NAME OF PWS:	Military Highway Water Supply Corporation
PWS ID#:	0310147
PWS MAILING ADDRESS:	P.O. Box 250 Progreso, TX 78579
PWS CONTACT PERSON:	Antonio Lopez Jr.
ADDRESS OF SERVICE:	

The backflow prevention assembly detailed below has been tested and maintained as required by commission regulations and is certified to be operating within acceptable parameters.

TYPE OF BACKFLOW PREVENTION ASSEMBLY (BPA):				
☐	Reduced Pressure Principle (RPBA)	☐	Reduced Pressure Principle-Detector (RPBA-D)	Type II ☐
☐	Double Check Valve (DCVA)	☐	Double Check-Detector (DCVA-D)	Type II ☐
☐	Pressure Vacuum Breaker (PVB)	☐	Spill-Resistant Pressure Vacuum Breaker (SVB)	

Manufacturer:	Main:	Bypass:	Size:	Main:	Bypass:
Model Number:	Main:	Bypass:	BPA Location:		
Serial Number:	Main:	Bypass:	BPA Serves:		

Reason for test:	New ☐	Existing ☐	Replacement ☐	Old Model/Serial #			
Is the assembly installed in accordance with manufacturer recommendations and/or local codes?					☐ Yes	☐ No	
Is the assembly installed on a non-potable water supply (auxiliary)?					☐ Yes	☐ No	

TEST RESULT PASS ☐ FAIL ☐	Reduced Pressure Principle Assembly (RPBA)			Type II Assembly	PVB & SVB	
	DCVA		Relief Valve	Bypass Check	Air Inlet	Check Valve
	1st Check	2nd Check***				
Initial Test Date: Time:	Held at ____ psid Closed Tight ☐ Leaked ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐ Did it fully open (Yes ☐ /No ☐)	Held at ____ psid Leaked ☐
Repairs and Materials Used**	Main: Bypass:					
Test After Repair Date: Time:	Held at ____ psid Closed Tight ☐	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid

*** 2nd check: numeric reading required for DCVA only

Differential pressure gauge used:			Potable: ☐	Non-Potable: ☐	
Make/Model:		SN:		Date tested for accuracy :	

Remarks:

Company Name:		Licensed Tester Name (Print/Type):	
Company Address:		Licensed Tester Name (Signature):	
Company Phone #:		BPAT License #	
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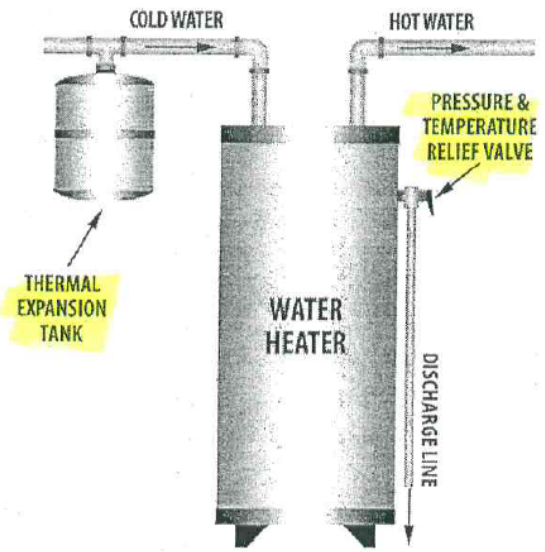
What is a closed system? What is thermal expansion?

A "closed system" is created when an approved backflow prevention assembly is installed at a customer's service connection. The backflow prevention assembly does not allow water to flow backward from the customer's private water system into the PWS's distribution system. "Thermal expansion" is a result of heating. When water is heated, its density decreases, and its volume expands. Backflow prevention assemblies and other one-way valves installed at a customer's service connection eliminate a path for expanded water to flow back to the distribution system, resulting in increased system pressure. This increase in pressure can result in pressure surges; dripping faucets; chronic or continuous dripping of temperature and pressure-relief valves on hot-water heating tanks; and other mechanical problems with hot-water heating tanks, including distortion and rupture. **All customer service connections that require the installation of a backflow prevention device should take the following steps to protect from the potential problems associated with thermal expansion!**

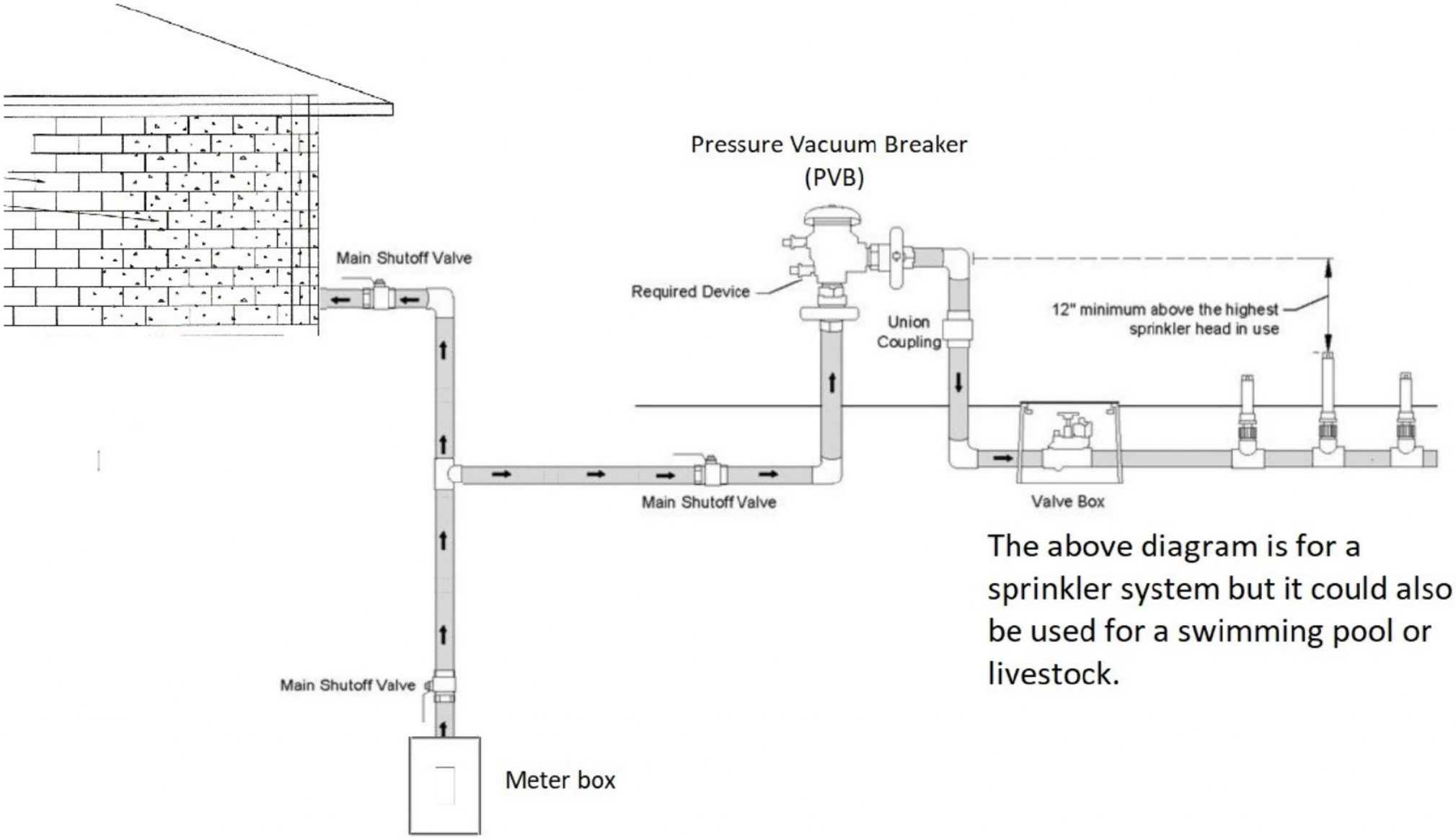
THERMAL EXPANSION CONTROL

Uncontrolled thermal expansion usually results in leaking faucets or burst washing machine supply hoses but may result in the collapse of the vent pipe on gas-fired water heaters, or **violently burst water heaters in extreme cases**. One way to protect from thermal expansion is the use of pressure relief valves. It is like the T & P valve on a water heater. Thermal expansion of heated water may occur wherever potable water is heated in a closed system. Another way to protect a closed system from the effects of thermal expansion is the use of thermal expansion tanks. A thermal expansion tank is designed to absorb thermal expansion that may be created by the hot water heater, if the water user's potable system is closed with a containment principal backflow prevention assembly, a check valve or a pressure reducing valve without an internal bypass. The expansion tank must be installed in the cold-water service piping on the supply side of the hot water heater prior to any control valves. The size of the expansion tank is based upon the size of the hot water heater and may be determined by referring to the manufacturer recommendations.

TYPICAL RESIDENTIAL INSTALLATION

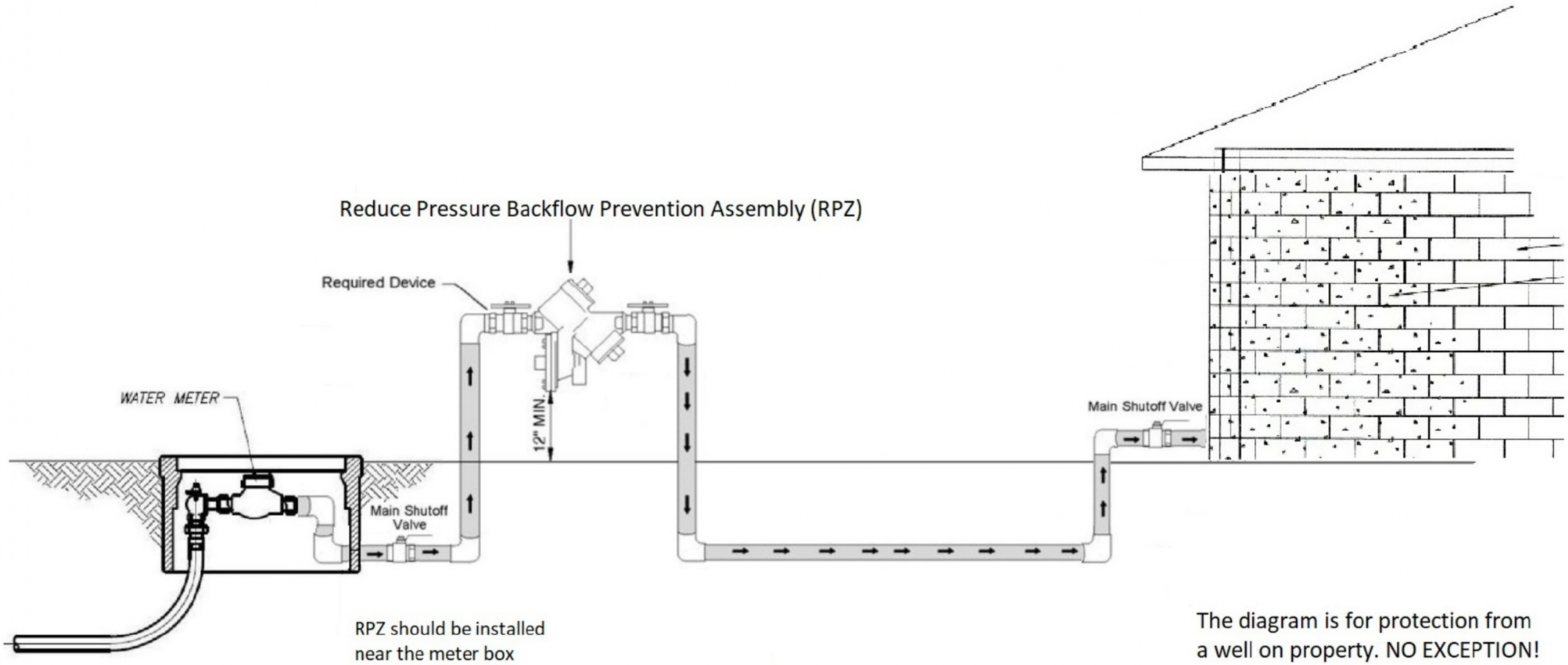


DEVICE TO PROTECT DRINKING WATER



The above diagram is for a sprinkler system but it could also be used for a swimming pool or livestock.

DEVICE TO PROTECT DRINKING WATER



RPZ should be installed near the meter box

The diagram is for protection from a well on property. NO EXCEPTION!

VACCUUM BREAKER HOSE BIB BACK FLOW PREVENTER

MUST BE INSTALLED ON EVERY OUTDOOR FAUCET
FUNTIONALITY: Vacuum Breaker will help you prevent dangerous contamination into potable water

INTERRUPTOR DE VACIO REFLUJO DEL BABERO DE LA MANGUERA

DEBE DE ESTAR INSTALADO EN CADA GRIGO EXTERIOR
FUNCIONALIDAD DEL INTERRUPTOR VACIO LE AYDARA DE PREVENIR CONTAMINACION PELIGROSA EL AGUA POTABLE