

# BACKSTOP® Diaphragm Type Thermal Expansion Tanks

## A SERIES (Non-ASME) SUBMITTAL

Lit.# BSASUB-810

**TYPE:** PRESSURIZED THERMAL EXPANSION TANKS FOR RESIDENTIAL WATER SYSTEMS

**MODELS:** A-101; A-102; A-103-S; A-104-S; A-105-S; & A-106-S

Job _____	Arrow Rep. _____	
Unit Tag No. _____	Order No. _____	Date _____
Engineer _____	Submitted By _____	Date _____
Contractor _____	Approved By _____	Date _____

### MATERIALS:

Shell: Carbon Steel  
 System Connection: Stainless Steel  
 Coating: Epoxy  
 Diaphragm: Heavy Duty Butyl Rubber  
 Liner Material: Food Grade Polypropylene  
 Factory Pre-set Pressure: 35 PSI

### OPERATING LIMITATIONS:

Maximum Design Pressure: 150 PSI (1035 kPa)  
 Maximum Design Temperature: 200° F (93° C)



Certified to NSF / ANSI-61

**MODELS:**  
 A101; A102;  
 A103; & A104



IAPMO Certified

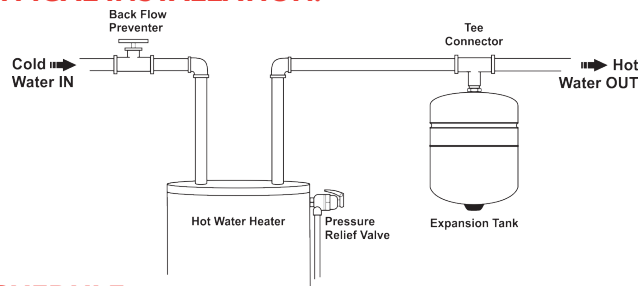
### APPLICATION:

BackStop® A Series Tanks are fixed diaphragm type pre-charged thermal expansion tanks. They are designed to absorb the expansion forces and control the pressure in potable water systems. The water is separated using the heavy duty diaphragm preventing tank corrosion and waterlogging

Model No.	Volume (liter)	Volume (gal.)	Height	Diameter	Sys. Conn.	Wt. (lbs.)
A-101	8	2	12-1/2"	8"	3/4"	5
A-102	18	4.5	15"	11"	3/4"	9
A-103-S	55	14	19-7/8"	15-1/2"	1"	19
A-104-S	80	20	27"	15-1/2"	1"	27
A-105-S	128	32	46-1/2"	15-1/2"	1-1/4"	43
A-106-S	176	44	35-1/2"	22"	1-1/4"	52

S denotes stand models.

### TYPICAL INSTALLATION:



### SCHEDULE:

Model Number	Tank Volume Gallons	Acceptance Volume Gallons	Tagging Information	Quantity
A-101	2	1.0		
A-102	4.5	2.4		
A-103-S	14	5.6		
A-104-S	20	8		
A-105-S	32	12.8		
A-106-S	44	17.5		

### SPECIFICATIONS:

Furnish and install as shown on plans a \_\_\_\_\_ gallon \_\_\_\_\_" diameter x \_\_\_\_\_" (high) pre-charged steel thermal expansion tank with a fixed butyl diaphragm. The tank shall have a top NPT system connection and a .301" - 32 charging valve connection (standard tire valve) to facilitate the on-site charging of the tank to meet system requirements.

Each tank shall be BackStop® model number \_\_\_\_\_ or approved equal.