



# CHILLED WATER BUFFER TANKS BARE STORAGE TANKS

A. O. Smith Chilled Water Buffer Tanks are designed to create volume in a chilled water system when the system and associated piping can not provide the chiller with the volume required for efficient operation. To meet this criteria, A. O. Smith's Chilled Water Buffer Tank is an ASME certified vessel and is available in various custom configurations and tank sizes.

Chiller manufacturers recommend a specific volume of water per ton of chiller capacity to maintain water temperature stability. These recommendations range from 3 to 5 gallons of system volume per ton of chiller capacity when used in a comfort cooling application, to system volumes of 6 to 10 gallons per ton when used in a process cooling application where temperature stability is critical.

Selecting the right tank is easy. After determining how much additional volume the tank will provide, select the size and configuration of the system connections that will best connect the tank to the chilled water system.

### **OUTSTANDING STANDARD FEATURES:**

- Vertical Internal Baffle to encourage proper mixing of fluid
- 125 PSI Working Pressure
- ASME Sec VIII, U-Stamped Vessel
- Five Year Limited Warranty
- Flanged Connections
- Lifting Lugs
- Red Oxide Paint

### **OPTIONAL EQUIPMENT:**

- "R-12" Spray Foam insulation with UV Resistant Exterior
- 12" x 16" Manway (300 gallons and above)
- 4" x 6" Hand Hole
- Automatic Air Vent
- Temperature and Pressure Gauge

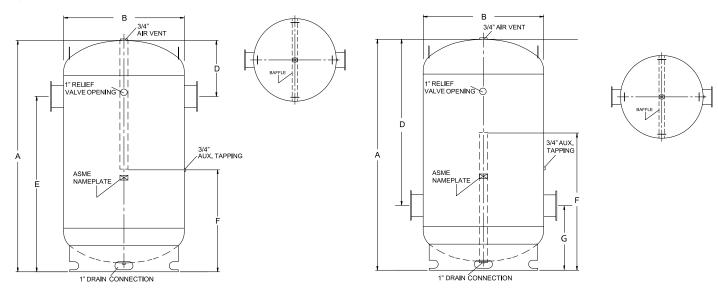




# WARNING

Use this vessel only in chilled water systems. DO NOT use in potable water systems. The installer must comply with all plumbing codes. DO NOT operate above the temperature or pressure specified on the rating plate. Failure to comply may result in personal injury, property damage, or death.

## Figure 1 Buffer tank dimensions, refer to table below



## DIMENSIONS AND SPECIFICATIONS

Chilled Water Buffer Tank w/ Upper or Lower Connections									
Model Number	Gallon Capacity	A	В	D	E	F	G	Max. Conn. Diameter	Weight (lbs.)
ACV*-120	120	56″	28″	20″	36″	19″	24″	6″	298
ACV*-200	200	86″	28″	20″	66″	29″	24″	6″	430
ACV*-325	318	76″	36″	23″	53″	25″	27″	8″	533
ACV*-450	432	76″	42″	25″	52″	25″	29″	8″	818
ACV*-500	500	87″	42″	25″	62″	29″	29″	8″	930
ACV*-750	750	100″	48″	27″	73″	33″	31″	8″	1430
ACV*-1000	1000	124″	48″	27″	97″	41″	31″	8″	1733

\*ACVL120 for Lower, ACVU for Upper and ACV4 for Lower and Upper Connections

Option Code:	
ACVU-120-3NT	T = T&P Gauge, S = Seismic, Z = T&P Gauge + Seismic
	N = NPT; B = Bolting Flange
	Number = inch size
	4 = 4 Connections (Upper and Lower); L = Lower Connections; U = Upper Connections

When custom options are ordered other than a manway or hand hole, custom option codes will be given.