

## Ac-U-Temp

### TOTAL HOT WATER SUPPLY SYSTEM USING VF™ BOILERS

VWT-500  
THROUGH  
VWT-1000

With Ac-U-Temp, A. O. Smith makes it as easy as possible to install a complete packaged hot water supply system, combining high-efficiency VF™ boilers with storage tanks up to 10,000 gallons. Each Ac-U-Temp system is custom-made to your specifications for each application and shipped fully assembled, pre-piped and pre-wired. All the installer has to do is make the flue, gas, electrical and water connections, so installations are easy. Consult your A. O. Smith representative for more information on the wide range of available boiler/storage tank combinations using the Ac-U-Temp system.



#### VF MODULATING BOILERS UP TO 88% THERMAL EFFICIENCY

- A. O. Smith's most efficient hot water supply boilers
- AVAILABLE INPUTS: 500,000, 750,000, 1,000,000 BTUS
- Flexible conventional-vent or sealed-combustion direct-vent options
- For complete information on VF Hot Water Supply Boilers, consult VF Specification Sheet

#### GLASSLINED STORAGE TANKS

- Standard capacities up to 1,000 gallons
- Custom tanks available up to 10,000 gallons
- Standard tanks are factory jacketed and insulated – bare uninsulated tanks also available
- Optional cement or epoxy-lined tanks available
- For complete information on standard and optional tanks, consult tank Specification Sheet

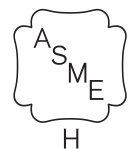
#### MULTIPLE BOILER SYSTEMS

- Ac-U-Temp systems can be designed with multiple boilers to provide 50% to 100% back-up
- Multi-boiler systems can be sequenced to meet changing system demands
- Sequenced multi-boiler systems with small storage tanks are ideal for applications with relatively constant hot water demands
- Optional sequenced control panel available
- iCOMM™ Compatible and can be monitored from remote locations - Call 1.888.WATER02 for more information



#### MULTIPLE TANK SYSTEMS

- Ac-U-Temp systems can be designed with multiple tanks for applications with low ceiling heights or other unique installation challenges





# Domestic Hot Water Boilers

## BOILER DATA

| MODEL NUMBER | INCHES OR CM | DIMENSIONS  |            |            |            |           |
|--------------|--------------|-------------|------------|------------|------------|-----------|
|              |              | LENGTH (C2) | WIDTH (C1) | HEIGHT (D) | INLET SIZE | GAS INLET |
| VW-500       | Inches       | 30          | 30         | 60         | 2          | 1         |
|              | CM           | 76.2        | 76.2       | 152.4      | 5.1        | 2.5       |
| VW-750       | Inches       | 30          | 30         | 66         | 2          | 1         |
|              | CM           | 76.2        | 76.2       | 167.6      | 5.1        | 2.5       |
| VW-1000      | Inches       | 30          | 30         | 75         | 2          | 1         |
|              | CM           | 76.2        | 76.2       | 190.5      | 5.1        | 2.5       |

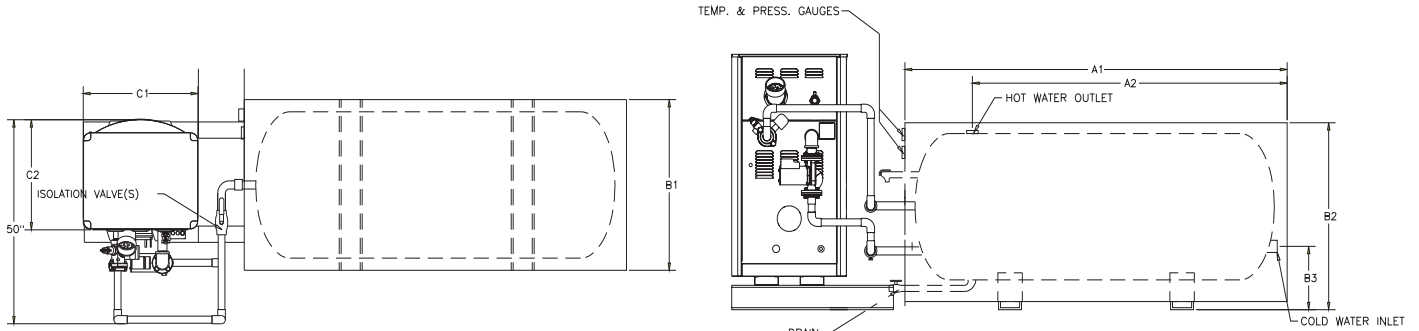
## VERTICAL STORAGE VESSEL DATA

| MODEL NUMBER | INCHES OR CM | DIMENSIONS |            |                   |            |             |
|--------------|--------------|------------|------------|-------------------|------------|-------------|
|              |              | HEIGHT (A) | WIDTH (B1) | INLET HEIGHT (B2) | INLET SIZE | OUTLET SIZE |
| AJ-80A       | Inches       | 66.25      | 28         | 15                | 2          | 2           |
|              | CM           | 168.3      | 71.1       | 38.1              | 5.1        | 5.1         |
| AJV-120A     | Inches       | 66         | 28         | 15                | 2          | 2           |
|              | CM           | 167.6      | 76.2       | 167.6             | 5.1        | 2.5         |
| AJV-140A     | Inches       | 88         | 30         | 23.5              | 2.5        | 2.5         |
|              | CM           | 223.5      | 76.2       | 59.9              | 6.4        | 6.4         |
| AJV-200A     | Inches       | 84         | 36         | 25                | 2.5        | 2.5         |
|              | CM           | 213.4      | 91.4       | 63.5              | 6.4        | 6.4         |
| AJV-250A     | Inches       | 97         | 36         | 25                | 2.5        | 2.5         |
|              | CM           | 246.4      | 91.4       | 63.5              | 6.4        | 6.4         |
| AJV-350A     | Inches       | 99         | 42         | 26.5              | 2.5        | 2.5         |
|              | CM           | 251.5      | 106.7      | 67.3              | 6.4        | 6.4         |
| AJV-400A     | Inches       | 106        | 42         | 26.5              | 2.5        | 2.5         |
|              | CM           | 269.2      | 106.7      | 67.3              | 6.4        | 6.4         |
| AJV-500TA    | Inches       | 101        | 48         | 28                | 3          | 3           |
|              | CM           | 256.5      | 121.9      | 71.1              | 6.4        | 6.4         |
| AJV-500A     | Inches       | 86         | 54         | 29.5              | 3          | 3           |
|              | CM           | 218.4      | 137.2      | 74.9              | 6.4        | 6.4         |
| AJV-750A     | Inches       | 118        | 54         | 29.5              | 3          | 3           |
|              | CM           | 299.7      | 137.2      | 74.9              | 6.4        | 6.4         |
| AJV-1000A    | Inches       | 150        | 54         | 29.5              | 3          | 3           |
|              | CM           | 381        | 137.2      | 74.9              | 6.4        | 6.4         |

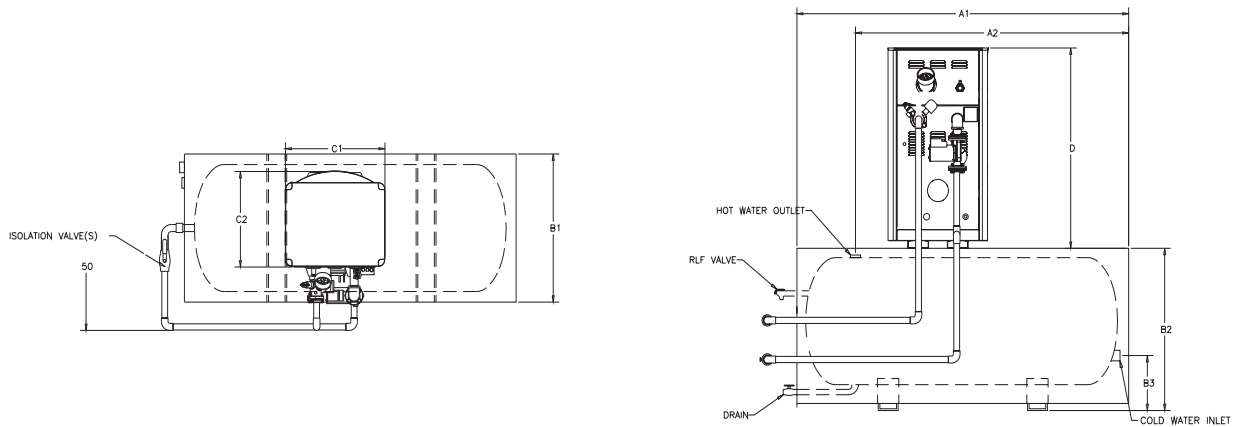
## HORIZONTAL STORAGE VESSEL DATA

| MODEL NUMBER | INCHES OR CM | DIMENSIONS  |                 |            |             |                   |            |             |
|--------------|--------------|-------------|-----------------|------------|-------------|-------------------|------------|-------------|
|              |              | LENGTH (A1) | OUTLET DIM (A2) | WIDTH (B1) | HEIGHT (B2) | INLET HEIGHT (B3) | INLET SIZE | OUTLET SIZE |
| AJH-200      | Inches       | 77          | 59              | 36         | 41          | 15                | 2.5        | 2.5         |
|              | CM           | 195.6       | 149.9           | 91.4       | 104.1       | 38.1              | 6.4        | 6.4         |
| AJH-350      | Inches       | 93          | 72.5            | 42         | 47          | 14                | 2.5        | 2.5         |
|              | CM           | 236.2       | 184.2           | 106.7      | 119.4       | 35.6              | 6.4        | 6.4         |
| AJH-400      | Inches       | 99          | 79.5            | 42         | 47          | 14                | 3          | 3           |
|              | CM           | 251.5       | 201.9           | 106.7      | 119.4       | 35.6              | 7.6        | 7.6         |
| AJH-500T     | Inches       | 94          | 73              | 48         | 53          | 16                | 3          | 3           |
|              | CM           | 238.8       | 185.4           | 121.9      | 134.6       | 40.6              | 7.6        | 7.6         |
| AJH-500      | Inches       | 79          | 56.5            | 54         | 59          | 16                | 3          | 3           |
|              | CM           | 200.7       | 143.5           | 137.2      | 149.9       | 40.6              | 7.6        | 7.6         |
| AJH-750      | Inches       | 111         | 88.5            | 54         | 59          | 16                | 3          | 3           |
|              | CM           | 281.9       | 224.8           | 137.2      | 149.9       | 40.6              | 7.6        | 7.6         |
| AJH-1000     | Inches       | 143         | 120.5           | 54         | 59          | 16                | 3          | 3           |
|              | CM           | 363.2       | 306.1           | 137.2      | 149.9       | 40.6              | 7.6        | 7.6         |

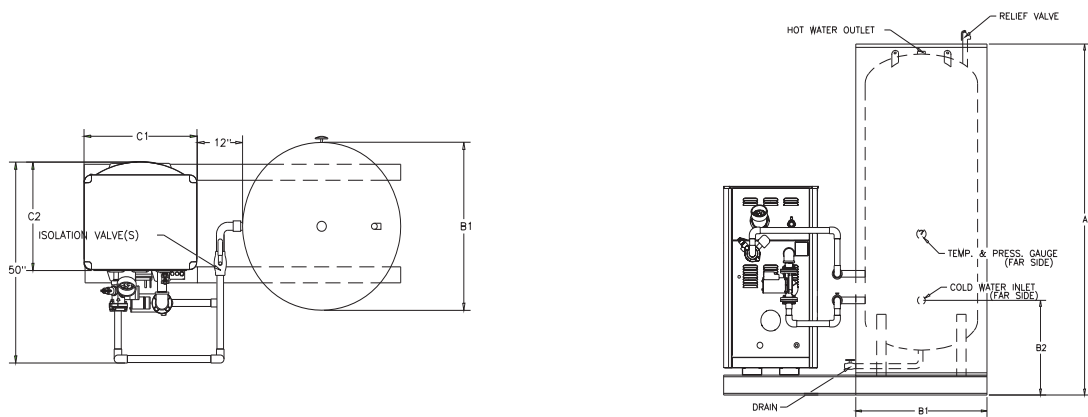
For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.



**Configuration H**



**Configuration P**



**Configuration V**

The above are standard available configurations. Custom configurations designed to your specifications are available. Contact your local A. O. Smith Sales Representative for assistance.



## Ac-U-Temp

### TOTAL HOT WATER SUPPLY SYSTEM USING VF™ BOILERS

#### DUAL-ENERGY SOURCE OPTION

- Storage tanks can be specified with an optional heat exchanger for winter heating using on-site hydronic heating boiler(s), switching to domestic hot water boiler(s) for summertime operation
- Water-to-water or steam-to-water heat exchangers available in single-wall or double-wall design
- Complete control packages can be factory-installed for “hook up and run” simplicity

#### FACTORY START-UP INCLUDED

- Required for activating warranty and assuring maximum operation performance. Contact your local representative or Authorized Start-Up Agent and arrange for a FREE certified setup.

#### CODE COMPLIANCE

- Meets the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IESNA 90.1

#### 5 YEAR LIMITED WARRANTY ON HEAT EXCHANGER AND STORAGE TANK

- For complete information, consult written warranty

#### OTHER FEATURES:

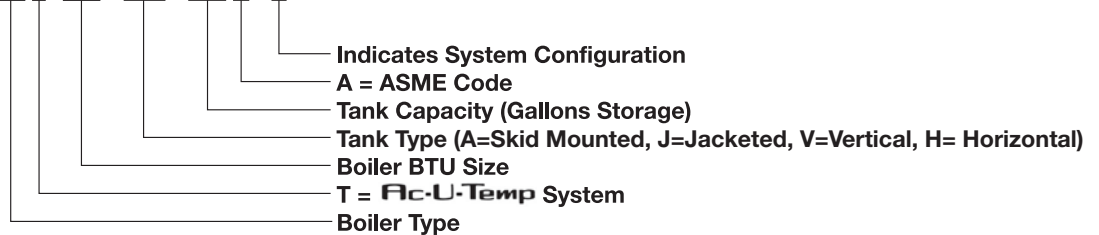
- ASME TEMPERATURE AND PRESSURE RELIEF VALVE #125
- TANK TEMPERATURE SENSOR AND THERMOMETER
- ISOLATION VALVES (BALL VALVES)
- 125 PSI TANK WORKING PRESSURE
- ALL-BRONZE CIRCULATING PUMP
- LARGE SYSTEMS SHIPPED WITH SPLIT/ BOLT TOGETHER SKIDS FOR EASE OF SHIPPING AND INSTALLATION

#### OTHER OPTIONS:

- 150 AND 160 PSI TANK WORKING PRESSURES
- 11" X 15" MANHOLES

Model to Specify:

**VW T -750 - AJV - 500 A - V**



#### SUGGESTED SPECIFICATION

Hot Water Supply System - shall consist of A. O. SMITH Ac-U-Temp factory assembled unit Model No. \_\_\_\_\_. System shall be completely factory assembled and shall include the A.O. SMITH VF hot water supply boiler(s), with input of \_\_\_\_ BTU/H for (natural/propane) \_\_\_\_ gas and recovery capacity of \_\_\_\_ gph, and the A.O. SMITH glass-lined (cement/epoxy) hot water storage tank with \_\_\_\_ gallons capacity for \_\_\_\_ mounting (vertical-horizontal). System shall include properly sized circulator, inlet and outlet thermometers, tank temperature thermometer, relief valve, and tank temperature control. Entire system shall be rigidly mounted on welded steel skid base and shipped assembled to job site (Ac-U-Temp systems employing tanks too large for shipping as an assembled unit, will be shipped with the tank mounted on a split bolt-together skid). See VF Boiler Specification Sheet for boiler details. See A.O. Smith Storage Specification sheets for storage tank details. Hot water supply boiler(s) and storage tank(s) shall have a 5 year limited warranty against corrosion as outlined in the written warranty.

Water heater should incorporate the ICOMM™ system for remote monitoring leak detection and fault alert.