

# SSV Series

- Gas-Fired Wall Hung **Modulating Condensing Boiler** 
  - 95% AFUE
  - 5:1 Turn Down Ratio
  - Patented Vertical Heat Exchanger
    - Patent No. US 10,012,413 B2
    - Low Maintenance, Self-Cleaning
    - Designed in the U.S., for the U.S.
    - 150 psi MAWP
  - Approved for PVC, CPVC and Polypropylene venting
  - Warranty Coverage
    - 15 Year Limited Heat Exchanger Warranty
    - FREE 2-Year Parts & Labor Limited Warranty\*
  - Built by American Craftsmen since 1928



\*Unit must be registered within 60 days from the date of original installation. All terms of Trinity Extended Service Agreement apply.













# Original...

The heat exchanger is the critical component of any boiler and is primarily responsible for efficiency and durability. At the heart of the 95% efficient SSV is the Utica family's unique, vertically mounted helical fin tube heat exchanger, made of 316L/444 stainless steel. The fins are laser welded onto the stainless tube resulting in greater strength and heat transfer capabilities.



#### SSV Coil

The SSV offers a round shape and a large diameter coil for better water flow and reduced scaling.

The vertically positioned SSV heat exchanger coil drains away any debris and scale and in doing so is self cleaning.

### Economical...

The Utica SSV is 95% AFUE (Annual Fuel Utilization Efficiency) and has been awarded ENERGY STAR® Most Efficient status. The SSV's advanced control automatically regulates boiler operation to ensure you are using the least amount of fuel possible.

The SSV's control adjusts both the amount of gas being burned (modulation) as well as the boiler water temperature (outdoor reset). Gas burner modulation reduces your fuel cost by adjusting the fuel burned to meet the actual demands of your heating system. Rarely will your home require the full capacity of the SSV and burning more gas than needed is bad for your budget and the environment. Outdoor Temperature Reset adjusts the boiler water temperature based on outdoor conditions. During cold periods, water temperature is increased. As it gets warmer, water temperature is lowered. Varying the water temperature reduces your fuel costs.

The increased efficiency of the Utica SSV could save up to 40% on heating bills annually.\*

The 95% AFUE efficiency of the Utica SSV allows it to qualify for State, Federal and local Utility company rebates.\*\*

The average water heater is rated at .59 EF - Energy Factor, measure of the useful energy coming out of your water heater divided by the amount of energy consumed to heat domestic water. The typical water heater accounts for 18% of your fuel bill. One of the conveniences of heating with a boiler is the ability to use it to generate your domestic hot water. By pairing your 95% efficient SSV with an H2O indirect water heater tank you will reduce your fuel consumption for heating hot water, increase the amount of hot water available and be protected with a lifetime tank warranty. Ask your heating contractor to replace your inefficient standalone hot water tank with an H2O.

## Dependable...

#### **Utica's Stainless Steel Heat Exchanger**

- ASME certified to operate in applications up to 150 psi though the typical residential application is around 15 psi
- Every heat exchanger is tested up to 375 psi; this is 25 times the typical residential boiler system operating pressure
- Proven reliability with tens of thousands of successful U.S. boiler installations

#### **Utica Quality**

- · Every boiler is test-fired at the factory
- Complete combustion test is performed and a computer printout of the results are shipped with every boiler to ensure proper commissioning

#### 15 Year Limited Manufacturer's Warranty

The SSV heat exchanger is simply the finest ever designed and as such we provide the strongest factory warranty available. An additional first year leak-free heat exchanger coverage provides the original purchaser the right to select a new replacement SSV boiler or heat exchanger at their choice, and receive a labor allowance of \$500.00 for the servicing contractor.



# The **SSV** is an *original, economical, dependable approach* to residential heat and domestic hot water.



#### **Key Features**

#### **Gas Supply**

• Top Pipe connection with built-in drip leg saves material & time



#### **Electrical Wiring**

 Easy Access / Protected Terminal Strip



#### **Patented Heat Exchanger**

- 316L/444 stainless steel fin tube
- Vertically mounted
- Self-cleaning
- 150 psi MAWP
- Designed in the U.S., for the U.S.



Polypropylene Flue Collector

• Corrosion resistant

#### **H2O Indirect Water Heater**

- All 316 L Stainless
   Construction no dissimilar metals to corrode
- Top Piping Connection saves material/time
- Stainless Dip Tube
- Extruded Stainless Steel Wall
- Coil Stand Off eliminates shipping damage
- Equipped with T&P and Relief Valves
- Less than 1/2 F degree loss per hour
- Smooth coil design eliminates sediment collection
- Limited Lifetime Warranty





#### **Advanced Controls**



- 5:1 turn down ratio
- Easy to understand English text display
- Outdoor reset maximizes fuel economy
- Priority domestic hot water meets changing demands
- Connections for Primary pump, CH pump, and DHW pump
- Automatically manages up to 16 units in Multiple Boiler System

SETTINGS

Central Heating
Setpoint 188°F

SETTINGS

SETTINGS DHW Setpoint 180°F

There are two basic settings; one for Central

Heating and one for Domestic Hot Water. Both have factory pre-sets for standard installation and require no further adjustment. If desired, adjusting the settings is as easy as pushing a button!

When using the Outdoor Air Sensor the Central heat setpoint automatically adjusts itself!

#### **Factory Tested**





• Certified to ASME standards in ECR's factory



#### **Boiler Input Rate** Heating **Net AHRI** (MBH) (1) **Dimensional Diagram** Model Capacity Rating, Water **AFUE %** (MBH) (1) (2) (MBH) (1) (3) Maximum **Minimum** SSV-050 50 10 47 41 95 **FRONT** SSV-075 75 15 69 60 95 (A) SSV-100 100 20 92 80 95 SSV-150 150 30 140 122 95 162 SSV-200 200 40 186 95 (1) 1000 Btu/hr (British Thermal Units Per Hour) (B) (2) Heating Capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedures. (3) Net AHRI Ratings based on piping and pickup allowance of 1.15. Contact Technical Support before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system TOP operation, extensive piping systems, etc General Information (See Installation, Operation and Maintenance Manual for complete instructions) Vent Connecto Combustion Air Gas Connection **Combustible Materials** Dimension Service (4) (5) Safety Relie (Required) (4) Valve Connection (¾ NPT) Clearances Top 0" (0 cm) 14" (36 cm) Left Side 0" (0 cm) 0" (0 cm) (4) Required distances measured from **Right Side** 0" (0 cm) 0" (0 cm) boiler jacket. Front 0" (0 cm) 6" (16 cm) BOTTOM Back 0" (0 cm) 0" (0 cm) (5) Service, proper operation clearance **Bottom** 0" (0 cm) 12" (32 cm) recommendation. Combustion 0" (0 cm) 6" (16 cm) Knockouts Hot Water Piping See Local Code 6" (16 cm) (Schedule 40 PVC) Combustion Air & Vent Pipe Equivalent 2" Pipe 3" Pipe System Length 050 075/100 75/100 150/200 BACK 6 Ft. 6 Ft. 6 Ft. 6 Ft. Minimum Length (1.8 m)(1.8 m)(1.8 m)(1.8 m) 50 Ft. 100 Ft. 100 Ft. 100 Ft. Maximum Length (30.5 m)(15.2 m) (30.5 m)(30.5 m) Note: Refer to IOM and vent pipe manufacturer's instructions for equivalent vent lengths and alternate venting materials (E) (D Connections Return/Supply Water Gas In **Condensate Drain** 1/2" NPT 050/075/100 3/4" Copper stub 3/4" NPT 150/200 3/4" NPT 3/4" NPT 1" Copper stub Wall Hanging Bracket **Electrical** 120 Volts AC, 60hertz, 1 phase, Less than 12 amps (15 amp circuit recommended) Natural Gas - Min: 3.0" w.c. (0.7 kPa), Max: 13.5" w.c. (3.3 kPa) **Gas Pressure** Propane - Min: 5.0" w.c. (1.2 kPa), Max: 13.5" w.c. (3.4 kPa) **Dimensions Water Content** 050/075/100 - 1.1 Gallons, 150/200 - 1.8 Gallons 050 150 Wall Mounted: Bracket included. Models 075 200 Boiler Control Module: Automatic Low Voltage/Intermittent Direct Spark Ignition/Modulating with 100 a 5:1 combustion turn down ratio. For multiple boiler applications - the control module can stage 20" 23" User Display interface: Easy programming with text display. Outdoor Temperature Sensor included. Width "A" Standard Equipment 508 mm 584 mm Heat Exchanger: High grade 316L/444 Stainless Steel Fin Coil with Flame Sight Glass. Combustion: Gas Valve with Premix Venturi and Blower, Durable Stainless Steel Mesh Modulating 27.75 37.75 Burner with 5:1 turn down ratio, Direct Spark Igniter and Flame Sensor. Height "B" 705 mm 959 mm Electrical: Low Voltage Terminal Strip, High Voltage Junction Box and Transformer. Other: 30 PSI Safety Relief Valve, Boiler Drain Valve and Condensate Drain with built in trap. 14.75 16.3 Depth "C" LP Converstion Kit, Concentric Vent Kit (2" and 3"), System Sensor (For Multiple Boiler Applications) **Options** 357 mm 414 mm 24.41" 35.6 Bracket "D" 620 mm 904 mm Certifications 40.75 30.75 Ht. w/Piping



781 mm

**ECR International Inc.** 2201 Dwyer Avenue, Utica, NY 13501 Tel. 800 253 7900 www.ecrinternational.com

1035 mm

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150 psi MAWP

"E'