



# **MODEL INN 1350**

**TECHNICAL DATA SHEET** 

## Innovation Commercial Water Heating System

The AERCO Innovation Water Heater utilizes state-of-the-art technology to easily meet highly diverse, demanding commercial and industrial hot water requirements in a compact and reliable condensing design. The durable high efficiency helical firetube heat exchanger is time tested to be impervious to thermal stress for an extended life. The all stainless steel construction maximizes longevity in the condensing application and the corrugated tubes increase effective heat transfer surface area for optimal thermal efficiencies up to 99%. Enhanced waterside flow distribution maintains constant minimum velocities across the heat exchanger; this keeps solids in suspension and greatly reduces scale dropout to maintain high efficiency performance and long life.

The advanced control system of the Innovation incorporates dynamic feed-forward sensing for precise modulation of its 30:1 turndown air/fuel delivery system. These controls fire the unit to accurately match load requirements and produce tight hot water outlet temperature control. Wasteful overshooting and cycling are virtually eliminated as is the need for storage tanks, mixing valves and other temperature averaging components in most applications. The set point is adjustable from 50°F to 190°F and control to +/- 4°F is easily achieved. Sidewall, through–the–roof, and sealed combustion capabilities provide broad installation flexibility. The small foot print, doorway size, and quiet operation make it ideal for retrofit. With its tight temperature control, high efficiency, reliability and longevity the AERCO Innovation is truly unique and advanced design.

#### **RECOVERY CAPACITY\*:**

Temperature Rise (F)	60°	70°	80°	90°	100°	110°	120°	130°	140°
Gallons Per Minute	43.6	37.4	32.8	29.1	26.2	23.8	21.8	20.2	18.7
Gallons Per Hour	2620	2244	1968	1746	1572	1428	1308	1212	1122

<sup>\*</sup>In condensing mode <2000 ft above sea level

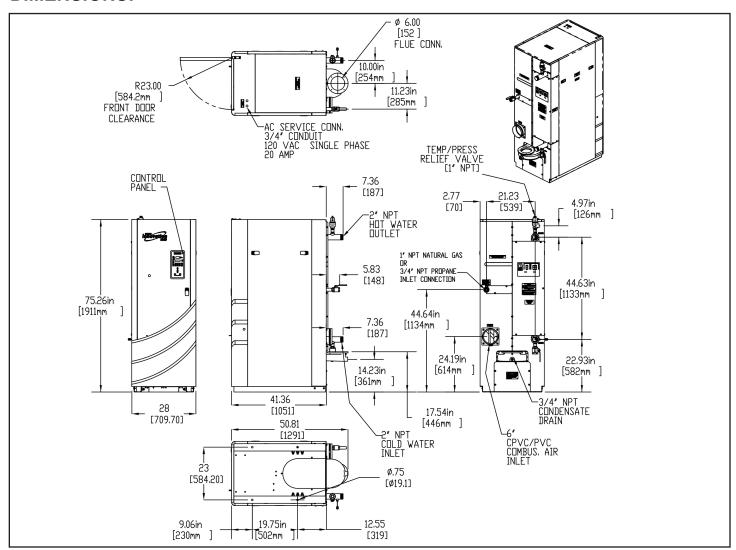
#### **FEATURES:**

LOW LEAD COMPLIANT ANSI/NSF 372

- Precise Temperature Control +/- 4°F
- Fully Modulating, 30:1 Energy Input
- Condensing Design
- Stainless Steel Heat Exchanger
- · Compact, Space Efficient Design
- Natural Gas or Propane
- Outlet Water Temperature of 50° to 190°F
- UL, CUL Listed for Closet Installation on Combustible Flooring

- NOx Emissions: 13.9 Ng/J @ 3% O<sub>2</sub> (Natural Gas)
- 160 PSIG ASME Working Pressure Certified
- Direct or Conventional Vent with PVC, CPVC, PP, or AL29-4C Materials
- Quiet Operation throughout Firing Range <55 dba</li>
- Remote Alarm Contacts
- Sealed Combustion
- UL, CUL Listed, FM Compliant, ASME Section IV (HLW) Stamped

#### **DIMENSIONS:**



### **SPECIFICATIONS:**

Adjustable Temperature Control	50°F to 190°F
Ambient Temperature	0°F to 130°F
Accuracy	
Input	1,350,000 BTUH
Net Output	1,310,000 BTUH
Turndown Ratio	
Flue Size	6" Diameter
Flue Material (per local code)PV	C, CPVC, PP or AL29-4C
Water Inlet & Outlet	
Gas Connection	1" NPT Male (Nat. Gas)
	.3/4" NPT Male (Propane)
Gas Pressure Requirements	14" WC Maximum
4" WC Minimu	m @ Full Load (Nat. Gas)
6" WC Minimu	um @ Full Load (Propane)

Maximum Continuous Water Flow.	50 GPM
Condensate Connection	3/4"NPT Female
Maximum Condensate Flow	11 GPH
Pressure Rating	160 PSIG @ 210°F
NOx Emissions Certifications	SCAQMD, TCEQ
Standard Listing & Approvals	UL, CUL, ASME, (HLW)
Gas Train OptionsFM Co	ompliant or Factory Installed
Double Blo	ck and Bleed (Formerly IRI)
Electrical Requirements120	0/1/60 20 AMP (9 Amp FLA)
Water Pressure Drop @ 15 gpm	
Water Pressure Drop @ 30 gpm	1.5psi
Water Volume	20.6 gallons
Weight, Installed1,0	050 lbs (dry), 1,222 lbs (wet)
Weight Shipping	1,150 lbs

#### Represented By:

