



NYC Department of Buildings  
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Patricia Lancaster, FAIA, Commissioner  
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## Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

### **MEA 425-05-E**

Manufacturer: Heat Cell Technologies and/or Eco Heating Systems

Trade Name(s): Hamilton Engineering EVO micro & EVO duo  
Huron Valley Sales ProPak™

Product: Gas Water Heaters, Storage Water Heaters, with  
Input Ratings Above 75,000 BTU per Hour,  
Circulating and Instantaneous

Pertinent Code Section(s): Gas Water Heaters Volume III, ANSI 21.10.3 -  
Second Edition; CSA 4.1-2004, Addenda A:2003;  
Addenda B:2004

Prescribed Test(s): RS 14-6 (ANSI z 21.10)

Laboratory: Intertek, ETL Semko Division

Test Report(s): 3069654-005, dated December 8, 2005

**Description** – The products covered by this report are wall or vertical rack mounted; gas fired modulating condensing water heaters. Heat exchangers are all ASME stamped, 316L stainless steel, with sealed combustion burner and direct spark ignition. Water heaters are intended for direct vent application (see table below for sizes and maximum lengths), and shall be used with natural gas only. Water heaters operate on 208-240 volts with an amp draw of less than 12 amps. All listed water heaters are identical in construction, the only differences are the firing rate and the 499 or 599 series have two gas valves. Models and capacities as follows:

Model Number	Product Description:	Web Key Words	Trade Name
<u>HWD 00129</u>	<u>129,000 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO micro</u>
<u>HWD 00179</u>	<u>179,000 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO micro</u>
<u>HWD 00199</u>	<u>199,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO duo</u>
<u>HWD 00299</u>	<u>299,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO duo</u>
<u>HWD 00399</u>	<u>399,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO duo</u>
<u>HWD 00499</u>	<u>499,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO duo</u>
<u>HWD 00599</u>	<u>599,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Hamilton EVO duo</u>
<u>HWD 00129</u>	<u>129,000 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00179</u>	<u>179,000 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00199</u>	<u>199,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00299</u>	<u>299,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00399</u>	<u>399,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00499</u>	<u>499,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>
<u>HWD 00599</u>	<u>599,999 BTU Condensing Water Heater</u>	<u>water heater, condensing</u>	<u>Huron Valley Sales ProPak TM</u>

**Vent Piping must conform to the following:**

1. **PVC** Non Foam Core Pipe (Polyvinyl Chloride) to ASTM D-1784 Class 12454-B, Formerly designated Type 1, Grade 1.
2. **CPVC** (Chlorinated Polyvinyl Chloride) Class 23447-B, Formerly designated Type IV, Grade 1 conforming to ASTM D-1784.
3. **ABS** (Acrylonitrile-Butadiene-Styrene) Class 3-2-2-2 conforming to ASTM D3965.
4. **AL-29C** Stainless steel pressure sealed venting

**The EVO is a direct vent appliance. The EVO is listed as a Category IV Condensing Appliance. (The EVO Venting is rated at Zero Clearance to combustibles.)**

## Venting Requirements:

Model	Vent Size	Maximum combined vent length	Minimum combined vent length
129	3"	200'	6' + 2 (90°) elbows
179	3"	120'	6' + 2 (90°) elbows
199	3"	90'	6' + 2 (90°) elbows
299	4"	200'	6' + 2 (90°) elbows
399	4"	200'	6' + 2 (90°) elbows
499	5"	200'	6' + 2 (90°) elbows
599	5"	170'	6' + 2 (90°) elbows

### RECOMMENDED SERVICE CLEARANCES

(NOTE: The EVO is rated at zero clearance to combustibles.)

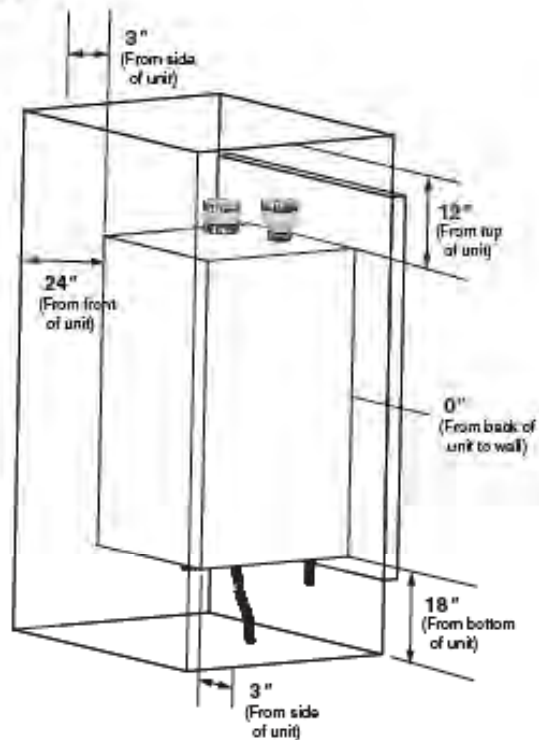


Figure 1-2: EVO Clearances

Fittings and Piping	Equivalent Feet
90 Degree Elbow =	5
45 Degree Elbow =	3
Coupling =	0
Air Inlet Elbow =	6
Coupling =	1
Air Inlet Elbow =	1 Per ft. of length

**Terms and Conditions-** That the above described residential water heaters installed as per clearances to combustible construction specific above be accepted when fired by natural gas only, under the following conditions:

1. Heaters shall not be installed in any enclosed space with volume of less than 100 cubic feet.
2. All shipments and deliveries of such equipment shall be provided with a laboratory label and a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to those tested and acceptable for use, as provided for in Section 27-131 of the Building Code.
3. Approval of all electrical equipment, apparatus, materials, and devices shall be obtained from the Department before installation.

Final Acceptance June 5, 2006

Examined By Siun Derkhudam