



## Report of Materials and Equipment Acceptance Division

NYC Department of Buildings  
280 Broadway, New York, NY 10007  
Patricia Lancaster, FAIA, Commissioner  
(212) 566-5000, TTY: (212) 566-4769

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 245-98-E Vol. III

**Manufacturer:** Thermal Solutions LLC, 1175 Manheim Pike, Lancaster, Pennsylvania 17604.

**Trade Name(s):** Evolution Boiler.

**Product:** Gas fired hot water boiler assemblies.

**Pertinent Code Section(s):** 27-800, 27-826, RS 14-2 (ANSI Z223.1).

**Prescribed Test(s):** RS 14-6 (UL 795). Underwriters

**Laboratory: Test** Laboratories Inc.

**Report(s):** UL File MH25585, dated December 9, 1998, March 24, 2000, May 15, 2001 and July 29, 2005.

**Description:** These gas fired boiler assemblies are low pressure water boilers with a maximum working pressure of 160 psig and a maximum working temperature of 250°F. The boiler assemblies are of the water tube design.

These gas fired boiler assemblies are intended for use with natural gas. The burners provided with these boiler assemblies are of the manufacturers own design and are of the pre-mix power type. The burners are intended for on/off, single fire operation, low/high/low operation or full modulation operation,

The burners are provided with an interrupted, high-tension spark ignition system for ignition of an interrupted, proved gas pilot, for ignition of the main gas fuel supply. Pilot and main burner flame proving and supervision is accomplished by a flame rectification system

The boiler assemblies are constructed, equipped, inspected, tested and marked in accordance with the ASME Boiler and Pressure Vessel Code, Section IV. The boiler vessels are metal stamped with the ASME "H" Symbol.

Units with boiler assembly model, fuel input rating, boiler horsepower rating and heating surface for each boiler model, are listed below:

Basic Boiler Model	Rated Fuel Input (on/off) operation or Maximum Rated Input (two stage or full modulation operation), Btu/hr	Minimum Rated Input, Btu/hr Two stage/modulation	Boiler Horsepower Rating, BHP	Heating Surface Sq. Ft.
EVH-100	100,000	Na/na	2.4	20
EVH-250	250,000	Na/83,300	6.6	65
EVH-500	500,000	Na/166,000	13.1	123
EVH-750	750,000	375,000/250,000	19.7	131
EVH-998	998,000	499,000/332,700	26.25	175
EVH-1000	1,000,000	500,000/333,000	26.25	175
EVH-1500	1,500,000	750,000/500,000	39.4	264
EVH-1985	1,985,000	993,500/661,000	52.2	352
EVH-2000	2,000,000	1,000,000/666,000	52.6	352
EVH-2000S	2,000,000	666,000	51.4	411
EVH-2500	2,500,000	833,000	66.2	518
EVH-3000	3,000,000	1,000,000	77.1	625

- Note: 1. Units may be installed on noncombustible flooring. Minimum installed clearances from combustible construction shall be as follows: top – 6 inches; front – 24 inches; sides and rear – 6 inches; vent connector – 18 inches.
2. Boiler assemblies can be installed in direct vent fashion. The direct vent installation consists of combustion air intake connector that allows the boiler assembly to take all air for combustion from outside the occupied space. The combustion air intake is separate from the flue gas vent.

**Terms and Conditions:** The above described hot water boilers, constructed in accordance with the ASME Boiler Code and installed as per clearances to combustible construction specified above, be accepted for use with natural gas only. This acceptance in no way includes the external piping, connections, and appurtenances thereto, which are required to fully conform with applicable provisions of law, but have not been tested in conjunction with this application. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Bureau of Electrical Control before installation. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placod, certifying that the equipment shipped or delivered are equivalent to those tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance October 20, 2005  
Examined By Sim Dorkindom