



# 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 48-08-E

**Manufacturer:** Yazaki Resources Co., Ltd.  
740 Higashimachi  
Hamamatsu, Shizuoka, JAPAN

**Trade Name(s):** AROACE

**Product:** Gas-fired, double-effect absorption chiller-heaters  
MEA Index #20-80 – Absorption Units

**Pertinent Code Section(s):** 27-770, 27-777, 27-800, RS 14-2 (ANSI Z223.1)

**Prescribed Test(s):** RS 13-11B (ANSI B9.1), RS 13-11 (UL 1995, UL 465),  
RS 14-6 (UL 795, ANSI Z21.17)

**Laboratory:** Underwriters Laboratories, Inc.

**Test Report(s):** SA6368, Volume 5, Section 4

**Description:** Gas-fired, double-effect absorption chiller-heaters, models **CH-MG150** and **CH-MG200**, are intended for chilling or heating water in commercial or industrial applications. Water is used as the refrigerant and lithium bromide is the absorbent. All refrigerant vessels in the units normally operate under vacuum conditions. Units are provided with a water cooled condenser-absorber, evaporator, heat exchanger and power type gas burner to heat the refrigerant. Burners are proportionally controlled during the cooling and heating mode to satisfy the chilled/hot water outlet temperature setpoint. The chiller-heater models, output capacities and gas burner input ratings are listed below:

Absorption Chiller-Heater Model	Output Capacity		Cooling or Heating High-Fire Firing Rate (Btu/hr)	Cooling or Heating Low-Fire Firing Rate (Btu/hr)
	Cooling (Tons)	Heating (Btu/hr)		
CH-MG150	150	1,245,000	1,500,000	450,000
CH-MG200	200	1,660,000	2,000,000	600,000

**Note:** Minimum installed clearances from combustible material shall be in accordance with RS 14-15 of the New York City Building Code.

**Terms and Conditions:** The above gas-fired absorption chiller-heaters in conjunction with compatible heat rejection equipment, such as a cooling tower (not part of this application), are accepted using natural gas fuel and lithium bromide with the minimum clearances to combustible materials as described above, when connected with compatible gas vents in accordance with article 15 of the Building Code, under the following conditions:

1. Cooling tower or other compatible outdoor heat rejection equipment, if installed within 100 feet of any dwelling unit window, complies with all provisions of Section 27-770, as to the maximum sound levels permitted for exterior mechanical equipment.
2. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Departments Electrical Advisory Board before installation.
3. Units shall be used in compliance with the Energy Conservation Construction Code of New York State.
4. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and accepted for use, as provided for in Section 27-131 of the New York City Building Code.

Note: In accordance with Section 27-131(d), all materials tested and accepted for use shall be subject to periodic retesting as determined by the Commissioner; and any material which upon retesting is found not to comply with Code requirements or the requirements set forth in the approval of the Commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the Commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

Final Acceptance June 12, 2008

Examined By Siun Desphelan