

## TOESTER 4/5 & 6/8 WALL MOUNTS

Model Numbers  
T4/5 WM-AR  
T4/5 WM-AS  
T6/8 WM-AR  
T6/8 WM-AS

### WALL MOUNTED HYDRONIC FAN COILS

**Compact and Quiet:** These small, but ultra responsive, heating units can deliver from 2,500 up to 9,200 BTU/hour to heat any space to an even and comfortable temperature using Micro-Zonal™ Technology. These rugged and reliable hydronic wall mounted space heaters are another in a long line of Turbonics' Fan Coils that specialize in bringing warmth to possibly difficult to heat areas.

**Compact Design:** The 4/5 and 6/8 Wall Mounts are designed to fit between wall studs with a recess cover that will mount flush to the wall.

**Mounting:** The Toesters come with a bleed valve and standard 1/2" pipe connections. Egg Shell White cover accepts latex paint & wall paper blending with all decors. Comes in either a Recess Flush Mount or Surface Mount models.

**Reliability:** All Turbonics products use components that have been tried and tested for years of reliability in other combinations. Five-Year limited warranty on the core and electrical components is the standard others aspire to.



Toester 4/5 & 6/8 Wall Mounts

## Notable Features & Options:

- Dependable:** 4-Pole Shaded motor for quiet operation and longer motor and bearing life.
- Sealed:** High output copper/aluminum coil can deliver up to an impressive 9,200 Btu/Hr.
- Compact:** Fits between studs and comes in either a Recess Flush Mount or Surface Mount.
- Controls:** A built-in two-speed switch offers Hi/Off/LO control. All units feature a built-in heat-sensing aquastat which controls the unit but can easily be field disabled.

disabled in the field if not required. (SEE FIG. 2)

- C. Unit is pre-wired from the factory on LO speed. Unit may be optionally installed with a remote mounted line voltage thermostat.
- D. All wiring should be done to all local and national codes.

## I. INSTALLATION: General

A. The Toester 4/5 and 6/8 WM unit heaters are forced hot water space heaters are suitable for connection to hot water supply at any pressure up to 125 P.S.I. Maximum water temperature should not exceed 200°F. The amount of air flow and the temperature and flow rate of water flowing through the unit determine heating output.

B. Building codes and plumbing regulations may vary. Check local codes and regulations before determining proper application and installation. (See KWM & HDX Application Manuals)

C. **\*\*\*MOUNTING NOTICE\*\*\*** When mounting unit OVER sheet rock the side mount angle bracket should be toward the front of the unit. When Mounting this unit UNDER sheet rock the side mount angle bracket should be toward the back of the unit. See FIG. 1 for rough in dimensions..

## II. PIPING: General

A. The piping to the unit will usually be copper or any other locally approved piping. Accessible 1/2" sweat fittings are provided on the unit itself and can be connected from the bottom or in from the left side. An optional Flexible Stainless Steel Connector Kit with shut-off valves is available for connecting the unit to any type of piping system.

B. All piping systems should be designed by a technician with experience in the various piping arrangements that work with this type of unit.

C. As with any system employing circulated water, the pipes passing through unheated spaces should be insulated.

D. When using mono-flo or "venturi" fittings, we suggest placement of a ball valve just after the supply take-off and before the return is connected.

## III. PIPING - HOT WATER BOILER

A. The unit supply line should be taken from the boiler side beyond any flo-control valve. If the system being used is a gravity-flow or cast-iron hot water system, a separate circuit must be installed.

## IV. PIPING - WATER HEATER:

A. To install correctly, a technician with knowledge of piping arrangements and back-flo valves must design the piping system.

## V. WIRING THE UNIT:

A. A field wiring connection is provided on the unit. Connect wires at this point only.

B. The unit is manufactured with a built-in factory wired aquastat with a set point of 140°F on and 110°F off. The aquastat may be

## VI. COMPLETION:

- A. Secure unit to floor through holes on perimeter of the bottom plate (screws provided).
- B. Bleed the unit, secure the access panel and install front grille cover.

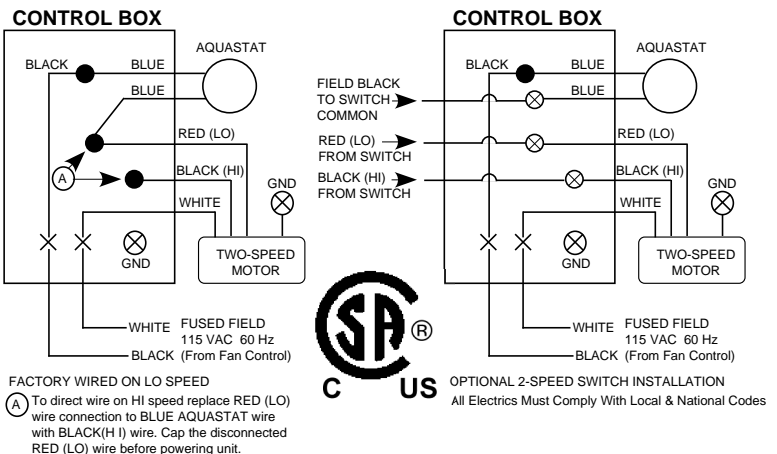
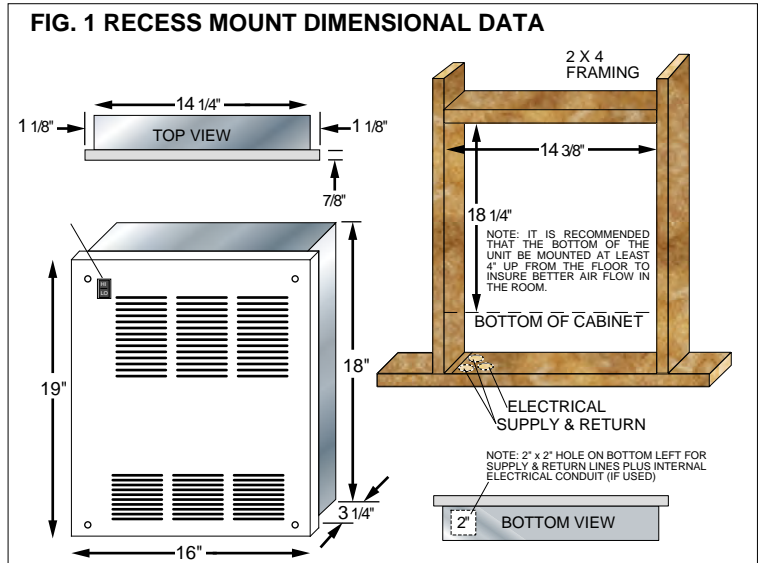


FIG. 2 CONTROL WIRING OPTIONS

TOESTER 4/5 RATINGS*								
AMPS	RPM	CFM	120°	140°	160°	180°	200°	
HI	.6	1350	75	3100	4000	4900	5800	6500
LO	.18	900	55	2300	3200	4100	4900	5700
Motor less than 1 Amp			Pressure Drop (Feet of Head)					
			.33' @ 1 GPM	1.0' @ 2 GPM	4.0' @ 4 GPM			

TOESTER 6/8 RATINGS*								
AMPS	RPM	CFM	120°	140°	160°	180°	200°	
HI	.6	1350	90	3900	5250	6700	7800	9200
LO	.18	900	65	3000	4150	5300	6200	7300
Motor less than 1 Amp			Pressure Drop (Feet of Head)					
			.5' @ 1 GPM	1.5' @ 2 GPM	6.0' @ 4 GPM			

\* Heat Ratings based on 2 GPM and 65°F Entering Air. For 1 GPM multiply by .95 factor.

## 5 YEAR LIMITED WARRANTY

Turbonics, Inc. warrants to the original user each new product manufactured by it or sold under its trade names to be free from defects in workmanship and material under normal use and service for a period of five years from date of shipment from the factory warehouse excluding the pump on the Chill Chaser whose warranty is one year. The sole liability of Turbonics, Inc. under this warranty is limited to repairing, or at its option, replacing free of cost, any defective part or parts f.o.b. it's factory, provided that (1) the defective part is returned prepaid to Turbonics, Inc. upon its written authorization, and (2) Turbonics, Inc. determines the defective part has not been subjected to misuse, abuse, negligence, accident, or improper installation, operation, service or repair. This warranty does not include any field labor charge involved in removal of the defective part or installation of the repaired or replacement part. During the first year, with prior factory approval, a labor charge of \$15.00 per hour may be applied for on warranty repairs. This warranty is made only to the original user of the product and cannot be transferred or assigned, and it is effective only while the product is in use at the place of original installation. Such warranty shall not apply to any product on which the serial number or date of manufacture has been altered, effaced or removed. This warranty applies only to products installed within the continental boundaries of North America. This warranty constitutes the only warranty, or representation of Turbonics, Inc. and no other warranty, or representation, statutory or otherwise, is expressed or may be implied. In no event will Turbonics, Inc. be responsible for special or consequential damages of any kind whatsoever.

## TOESTER 11/13 WALL MOUNT

Model Numbers  
T13 WM-AR  
T13 WM-AS

### WALL MOUNTED HYDRONIC FAN COILS

**Compact and Quiet:** These small, but ultra responsive, heating units can deliver from 2,500 up to 16,200 BTU/hour to heat any space to an even and comfortable temperature. These rugged and reliable hydronic wall mounted space heaters are another in a long line of Turbonics' Fan Coils that specialize in bringing warmth to possibly difficult to heat areas.

**Compact Design:** The 11/13 Wall Mounts are designed to fit between wall studs with a recess cover that will mount flush to the wall.

**Mounting:** The Toesters come with a bleed valve and standard 1/2" pipe connections. Egg Shell White cover accepts latex paint & wall paper blending with all decors. Comes in either a Recess Flush Mount or Surface Mount models.

**Reliability:** All Turbonics products use components that have been tried and tested for years of reliability in other combinations. Five-Year limited warranty on the core and electrical components is the standard others aspire to.



Wall Mounts

**Built-in Features:** Each of the Toesters come with an optional switch that allows for an Hi-Off-Lo fan selection. This switch can allow the fan to run more frequently at a lower speed if used so that heat is constant and enveloping. There is also a temperature aquastat in the circuit that "feels" the temperature of the water and will not allow the fan to circulate air when the water is not up to temperature.

### Notable Features & Options:

- Dependable:** 4-Pole Shaded motor for quiet operation and longer motor and bearing life.
- Sealed:** High output copper/aluminum coil can deliver up to an impressive 16,200 Btu/Hr.
- Compact:** Fits between studs and comes in either a Recess Flush Mount or Surface Mount.
- Controls:** An optional two-speed wall-mountable switch offers Hi/Off/Lo control. The unit can be used without the switch and be controlled by the heat-sensing aquastat.

## I. INSTALLATION: General

A. The Toester 11/13 WM unit heater is a forced air hot water space heater suitable for connection to hot water supply at any pressure up to 125 P.S.I. Maximum water temperature should not exceed 200°F. Water Temperature, Air Flow and Water Flow Rate will determine output.

B. Building codes and plumbing regulations may vary. Check local codes and regulations before determining proper application and installation. (See KWM & HDX Application Manuals)

## II. PIPING: General

A. The piping to the unit will usually be copper or any other locally approved piping. Accessible 1/2" sweat fittings are provided on the unit itself. An optional Flexible Stainless Steel Connector Kit with shut-off valves is available for connecting the unit to any type of piping system.

B. All piping systems should be designed by a technician with experience in the various piping arrangements that work with this type of unit.

C. As with any system employing circulated water, the pipes passing through unheated spaces should be insulated.

D. When using mono-flo or "venturi" fittings, we suggest placement of a ball valve just after the supply take-off and before the return is connected.

## III. PIPING - HOT WATER BOILER

A. The unit supply line should be taken from the boiler side beyond any flo-control valve. If the system being used is a gravity-flow or cast-iron hot water system, a separate circuit must be installed.

## IV. PIPING - WATER HEATER:

A. To install correctly, a technician with knowledge of piping arrangements and back-flo valves must design the piping system.

## V. WIRING THE UNIT:

A. A field wiring connection is provided on the unit. Connect wires at this point only.

B. The unit is manufactured with a built-in factory wired aquastat with a set point of 140°F on and 110°F off. The aquastat may be disabled in the field if not required. (See Application Manuals)

C. Unit is pre-wired from the factory on Lo speed. Unit may be optionally installed with a remote mounted 2-speed switch (included) and/or a line voltage thermostat. (SEE FIG. 2)

D. All wiring should be done to all local and national codes.

## VI. SETTING UP THE UNIT

A. A bleed valve opened with a screw driver is provided on the unit at the left side above the water coil. A short piece of 1/8" I.D. rubber tubing may be slipped on the bleed valve, emptying into a small container while bleeding the air. The lines should be purged with water pressure on the system, but with the unit motor shut off.

B. The valve on the return is first closed, the valve on the supply line opened. The bleed valve should be opened until water flows out steadily. Then, with the valve in the supply line closed and the valve in the return line opened, air is removed in the same manner from the return line.

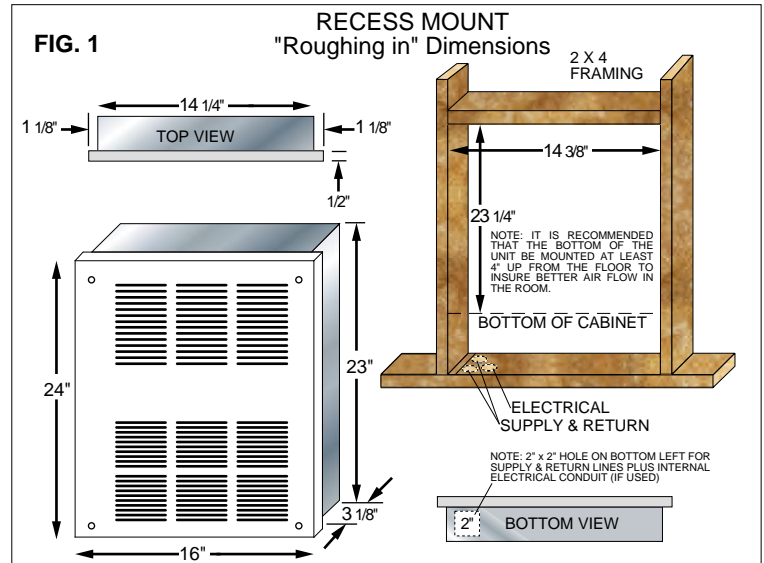
C. The time required for air removal will be 5 to 10 minutes for each leg of piping depending on the length of the piping run.

Note: The bleed valve is designed to vent the unit. If the unit is not located at the high point of a system, or if fresh water is continuously introduced, an additional automatic air vent may be required.

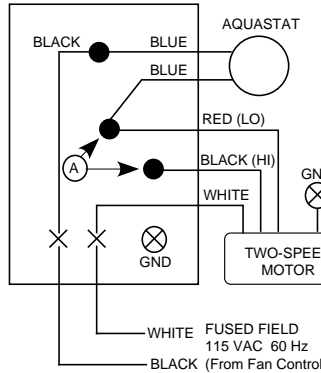
## VII. MOUNTING THE UNIT:

A. Brackets are provided on the surface mount units. The brackets are on 15" centers and should be lined up with studs (screws provided).

B. Recess mount dimensions



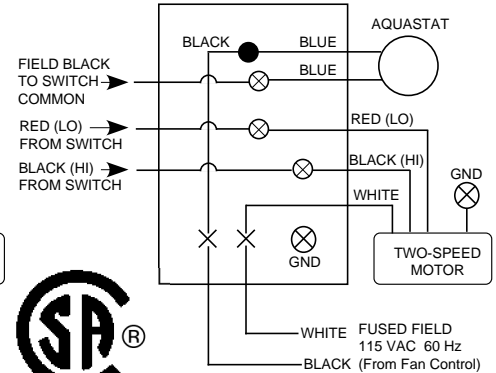
## CONTROL BOX



FACTORY WIRED ON LO SPEED

(A) To direct wire on HI speed replace RED (LO) wire connection to BLUE AQUASTAT wire with BLACK(H I) wire. Cap the disconnected RED (LO) wire before powering unit.

## CONTROL BOX



OPTIONAL 2-SPEED SWITCH INSTALLATION

All Electricians Must Comply With Local & National Codes

FIG. 2 CONTROL WIRING OPTIONS

TOESTER 11/13 WALL MOUNT RATINGS*								
AMPS	RPM	CFM	100°	120°	140°	160°	180°	200°
1.2	1350	HI 110	3500	5800	8200	10,900	13,200	16,200
.36	900	LO 80	2500	4000	6200	8800	10,900	13,800
			Pressure Drop (Feet of Head)					
			.5' @ 1 GPM    1.5' @ 2 GPM    6.0' @ 4 GPM					

\* Heat Ratings based on 2 GPM and 65°F Entering Air. For 1 GPM multiply by .95 factor. For 4 GPM multiply by 1.05 factor.

## 5 YEAR LIMITED WARRANTY

Turbonics, Inc. warrants to the original user each new product manufactured by it or sold under its trade names to be free from defects in workmanship and material under normal use and service for a period of five years from date of shipment from the factory warehouse excluding the pump on the Chill Chaser whose warranty is one year. The sole liability of Turbonics, Inc. under this warranty is limited to repairing, or at its option, replacing free of cost, any defective part or parts f.o.b. it's factory, provided that (1) the defective part is returned prepaid to Turbonics, Inc. upon its written authorization, and (2) Turbonics, Inc. determines the defective part has not been subjected to misuse, abuse, negligence, accident, or improper installation, operation, service or repair. This warranty does not include any field labor charge involved in removal of the defective part or installation of the repaired or replacement part. During the first year, with prior factory approval, a labor charge of \$15.00 per hour may be applied for on warranty repairs. This warranty is made only to the original user of the product and cannot be transferred or assigned, and it is effective only while the product is in use at the place of original installation. Such warranty shall not apply to any product on which the serial number or date of manufacture has been altered, effaced or removed. This warranty applies only to products installed within the continental boundaries of North America. This warranty constitutes the only warranty, or representation of Turbonics, Inc. and no other warranty, or representation, statutory or otherwise, is expressed or may be implied. In no event will Turbonics, Inc. be responsible for special or consequential damages of any kind whatsoever.