

GTHB/GTHC HIGH EFFICIENCY 4 POSITION NATURAL GAS OR PROPANE FURNACE



ENERG



UPFLOW, DOWNFLOW, HORIZONTAL LEFT OR RIGHT NATURAL GAS OR PROPANE

- Designed for maximum performance, comfort and energy savings
- Delivers whisper-quiet operation and long-lasting reliability
 - Compact and versatile



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Engineered for Home Heating Comfort and Efficiency

Up to *95% AFUE translates into significantly lower fuel bills

(AFUE = Annual Fuel Utilization Efficiency)

If your furnace is 25 years old or older, chances are that it is only 55% or 65% efficient. Refer to the chart below to see the savings you could realize by installing an **GTH** today. GTHC models qualify for the USA high-efficiency federal tax credit.



Annual Fuel Utilization Efficiency (AFUE)

Maximum Energy-saving features

Triple pass tubular heat exchanger

Constructed of aluminized steel, the **GTH**'s highly-efficient triple pass tubular design has a large surface area to maximize heat transfer into your home.

Heat recovery coil

The stainless steel coil of the **GTH** increases efficiency by extracting remaining heat from the flue gases once they exit the triple pass heat exchanger. By evenly distributing the remaining heat to the large fins of the coil, heat is efficiently delivered to your home.

Foil-faced insulation

The durable **GTH** cabinet is lined with foil-faced insulation to retain heat within the cabinet, allowing your furnace to run more efficiently.

Hot-surface igniter

The energy-saving, hot-surface igniter of the **GTH** replaces the pilot light used on older systems to reduce fuel consumed when the furnace is in standby mode.

PSC direct-drive blower motor

The **GTH**'s PSC motor reduces electrical consumption when compared to standard blower motors, and produces more CFM (cubic feet per minute) of airflow over older, belt-drive units.

Compact and versatile

At just 40 inches high and 29 inches deep, the **GTH** fits into most tight spaces – even closets!

Whisper-quiet operation features

Customers indicated that noise level was an important factor in their satisfaction with a furnace, so the **GTH** was designed to be "ultra quiet".

- Sound-absorbing cabinet insulation
- Sealed bearing motors
- Dynamically-balanced blower

Maximum performance and comfort

The **GTH** provides the best value in heating comfort for your family.

Four (4)-speed blowers

The **GTH**'s multiple speed blowers allow airflow to be matched with the needs of your home, eliminating "gusts" of hot or cold air and increasing overall comfort.

Simple plug-in connections

The **GTH** is designed to interface with additional home comfort products (air conditioner, electronic air cleaner and humidifier) through simple plug-in connections to the integrated furnace control board.

Long-lasting reliability

High-quality components make the **GTH** a sound investment that will help you sleep at night. Every component has to pass extensive testing, often simulating 20 years of operation, before it can be approved for use. Every **GTH** furnace passes a quality inspection and is test run before being released for shipping.

- Robustly-designed heat exchangers
- Heavy-gauge cabinets
- ISO-certified manufacturing

Easy installation and maintenance

- Factory-fired and tested for trouble-free start-ups
- Easily installed in all four positions with no changes to the furnace required¹
- Easily-removable blower assembly on rails
- Self-diagnostic integrated furnace control is mounted between the blower rails for easy accessibility
- Multiple intake/venting, gas pipe and electrical connection options
- Sealed bearing motors
- PVC elbows included for multiple venting options The blower assembly is easily removed for service and cleaning with the removal

of just two screws and a plug-in electrical connector. The blower rails support the weight of the assembly in all positions.

 $^{\mathrm{l}}\mathrm{The}$ draft inducer must be rotated in the horizontal left position.

* This chart depicts potential energy savings from the GTH. Data used for this example was 80,000 BTU heat load, 7000 Degree Days F per annum, fuel cost @ 1.08 per therm or .38 per cubic meter. Actual savings may vary, depending on your local weather patterns and fuel rates, lifestyle and the air infiltration integrity of your building envelope. The cost savings presented are for demonstration purposes only and do not constitute a guarantee of performance for any product.

Designed for Performance. Built to Last.

GTHB/GTHC KEY FEATURES

Engineered for High Efficiency with High-Quality Components that are Designed to be Quiet

- 1. Corrosion Resistant Heavy Gauge Aluminized-Steel Tubular Triple Pass Heat Exchanger
- Controlled wrinkle-bend design of heat exchanger creates tubes with consistent thickness and no weak areas
 - Highly-efficient triple pass tubular design has a large surface area to maximize heat transfer
 - Each row of tubes is offset to increase turbulence in the air flow and maximize heat transfer
 - Backed by a lifetime guarantee*

2. Stainless Steel Heat Recovery Coil

- Extracts the remaining heat from the flue gases once they exit the triple pass heat exchanger
- Increases efficiency by evenly distributing the remaining heat to the large fins of the coil
- Backed by a lifetime guarantee*

3. Aluminized Multi-Port in Shot Burners

- Corrosion resistant burners
- Perfectly shapes the flame cone for maximum energy efficiency

4. Induced Draft Venting

• Maximizes heat transfer efficiencies of the exchanger design through sealed combustion

5. Silicone Nitride Hot Surface Igniter

- Ignites the burners electronically for safe and efficient operation
- Eliminates the pilot light that consumes fuel while the furnace is in standby mode
- More reliable and durable than other igniters

6. Fast-Opening Gas Valve

- Assures safe and reliable operation while providing maximum efficiency
- Industry standard 24-volt gas valve

7. Self Diagnostic Integrated Furnace Control (IFC)

- Contains LED service indicator lights to ensure quick and accurate service calls
- Constantly monitors all safety devices
- Interfaces with additional home comfort products using simple plug-in connections
 Mounted between the blower rails for easy accessibility

8. Four (4)-Speed Permanently Separated Capacitor Motor (PSC)

- Reduces electrical consumption over standard blower motors
- Produces more CFM (cubic feet per minute) of airflow over older belt drive units
- Airflow can be matched with the needs of the home, eliminating "gusts" of hot or cold air
- Easily adapted for continuous slow speed operation

9. Dynamically Balanced Blower Assembly on Rails

- Whisper-quiet operation
- Easily removed for servicing with the removal of two screws and a plug-in electrical connector
- Rails support the weight of the blower for easy service in all positions

10. Durable Sound Reducing Insulated Cabinet

- Baked-on epoxy-based powder paint resists scratching and corrosion
- Sound-absorbing foil-faced insulation retains heat and quiets operation
- Knock-outs for all gas, electrical and venting connections

Reliability and peace-of-mind

Oneida Royal's **Limited Lifetime Warranty** is among the best in the industry! Every furnace comes with our guarantee to the original purchaser that the heat exchanger will be free from defects in materials and

workmanship as long as you own the appliance... or we'll supply a replacement heat exchanger free of charge!*

Our **Five-Year Parts Warranty** provides even more assurances. ECR warrants to the original purchaser that any component of the furnace will be free from defects in materials and workmanship for a period of five full years... *or we'll supply a replacement part free of charge!**

* Subject to the limitations set out in the warranty.





ECR's home comfort products are designed to provide years of trouble-free operation.

The "Comfort Plus" Extended Warranty program complements ECR's Standard Product Warranty by providing labor coverage and additional years of parts coverage depending on the plan purchased. If you sell your home, the "Comfort Plus" warranty can be transferred to the purchaser, adding to the value of your home.

Ask your installer for details on the "Comfort Plus" Extended Warranty program.



GTHB/GTHC HIGH EFFICIENCY 4 POSITION NATURAL GAS OR PROPANE FURNACE



HEATING CAPACITIES

-	Mode	GTHC050-3*	GTHC065-3*	GTHC080-3*	GTHC080-5*	GTHC100-3*	GTHC100-5*	GTHB040-2	GTHB060-3	GTHB080-3	GTHB080-4	GTHB100-3	GTHB100-5	GTHB120-5
	Efficiency (AFUE)	95%	95%	95%	95%	95%	95%	93%	93%	93%	93%	93%	93%	93%
G	Input (BTU) 0-2000'	48,000	64,000	80,000	80,000	96,000	96,000	40,000	60,000	80,000	80,000	100,000	100,000	120,000
	Output (BTU) 0-2000'	45,600	60,800	76,000	76,000	91,200	91,200	37,200	55,800	74,400	74,400	93,000	93,000	111,600
_	Input (BTU) 2000'-4500'	44,000	58,000	72,000	72,000	86,000	86,000	36,000	54,000	72,000	72,000	90,000	90,000	108,000
	Output (BTU) 2000'-4500'	41,800	55,100	68,400	68,400	81,700	81,700	33,480	50,220	66,960	66,960	83,700	83,700	100,440

AIRFLOW AND COOLING

14 x 22

14 x 22

14 x 22

14 x 22

Model	GTHC050-3*	GTHC065-3*	GTHC080-3*	GTHC080-5*	GTHC100-3*	GTHC100-5*	GTHB040-2	GTHB060-3	GTHB080-3	GTHB080-4	GTHB100-3	GTHB100-5	GTHB120-5
A/C Cooling Capacity (tons)	3	3	3	5	3	5	2	3	3	4	3	5	5
Max CFM @ .20 WC	1328	1621	1717	2172	1951	2305	1000	1300	1500	1900	1700	2200	2400
Max CFM @ .50 WC	1199	1524	1408	1965	1692	2150	800	1200	1200	1600	1200	2000	2000
	1/2 hp	1/2 hp	1/2 hp	3/4 hp	3/4 hp	3/4 hp	1/3 hp	1/2 hp	1/2 hp	3/4 hp	3/4 hp	3/4 hp	3/4 hp
Motor - PSC Direct Drive	(4 Speed)	(3 Speed)	(4 Speed)										

C

LEFT SIDE

CABINET DIMENSIONS (INCHES) Node GTHB080 GTHB100-3 GTHB100-5 Width (A) 20.5 18.5 18.5 20.5 17 18.5 20.5 23.5 23.5 17 20.5 29 29 29 29 29 29 29 29 29 29 29 29 Height (C) 40 40 40 40 40 40 40 40 40 40 40 40 Supply Air (F x G 17.5 x 20 19.5 x 20 19.5 x 20 16 x 20 17.5 x 20 17.5 x 20 19.5 x 20 16 x 20 22.5 x 20 22.5 x 20 16 x 20 19.5 x 20



MAXIMUM VENTING LENGTHS (EACH ELBOW EQUALS FIVE FEET)													
Model	GTHC050-3*	GTHC065-3*	GTHC080-3*	GTHC080-5*	GTHC100-3*	GTHC100-5*	GTHB040-2	GTHB060-3	GTHB080-3	GTHB080-4	GTHB100-3	GTHB100-5	GTHB120-5
Venting Length (feet)	100	75	100	100	100	100	100	100	100	100	100	100	100

14 x 22

RIGHT SIDE

Clearance to combustibles (upflow) on the top, front, sides and base is 0 inches (24 inches required in front for servicing). Certified for closet installations. *GTHC models qualify for the USA high-efficiency federal tax credit.

14 x 22



Upflow

3 exhaust and intake options (right side, left side, left top)
2 condensate

Return Air (D x E)

trap options (right or left side) • 2 gas and electrical supply options (right or left side)



left side) 2 gas and electrical supply options (right or left side)



14 x 22

Horizontal Right

- 2 exhaust options (right side, top) 3 intake options (right side, top
- and bottom)

 1 condensate trap option (right side)
- 2 gas and electrical supply options (top or bottom)



GTHB120-

23.5

29

40

22.5 x 20

14 x 22

Horizontal Left

- 1 exhaust option (top) 3 intake options (left side, top and bottom)
- 1 condensate trap option (left side)
- 2 gas and electrical supply options (top or bottom)





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All product specifications reflect available information at the time of printing. ECR reserves the right to revise or modify products without notice.



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