

# DURABILITY ON-DEMAND.

INTRODUCING A COMPLETE LINE OF ON-DEMAND  
GAS-FIRED WATER HEATERS.



**305 and 505  
Exterior**

**305 and 505  
Interior**



**705 Exterior**

**705 Interior**

## STATE ON-DEMAND GAS WATER HEATERS.

### Product Features:

#### Style

- Durable powder coated finish
- Smooth, pleasant lines and rounded corners
- Matching pipe cover available for finished appearance

#### Technology

- Interior and exterior installation options
- Continuous hot water on demand (up to 9.8 GPM)
- Whole house water heating solution
- Direct electronic ignition - no pilot light
- On-board diagnostics and safety monitoring

#### Durability

- Durable enough for 12-year limited warranty on heat exchanger, 5-year warranty on all parts
- Tough enough to deliver endless hot water
- Durable enough to be installed outdoors, saving valuable indoor square footage
- ASME models available

#### Tankless Energy Efficiency

- Up to 84% thermal efficiency providing significant energy cost savings

**Choose from 16 different interior  
and exterior models designed  
specifically for Residential or  
Commercial applications.**

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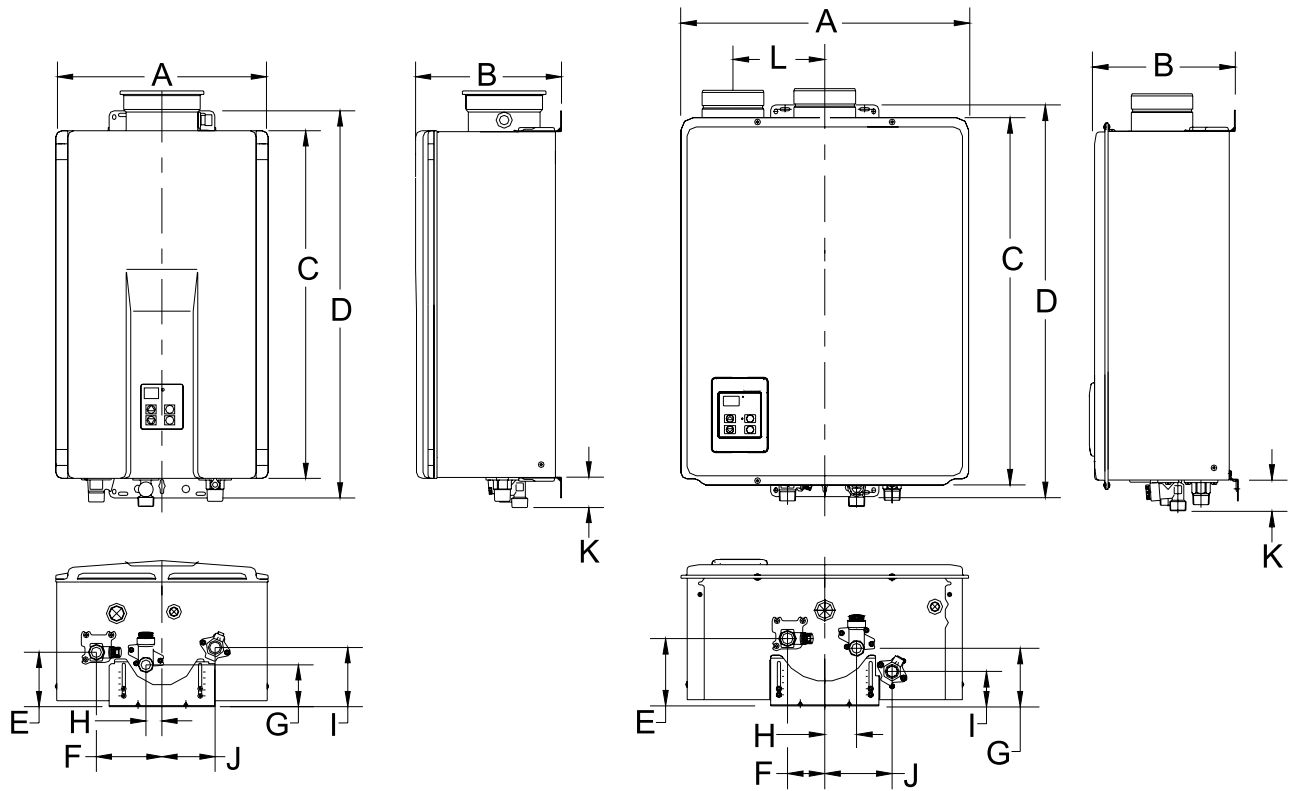




# INTERIOR DIMENSIONS

## 305 and 505 Interior Models

## 705 Interior Model



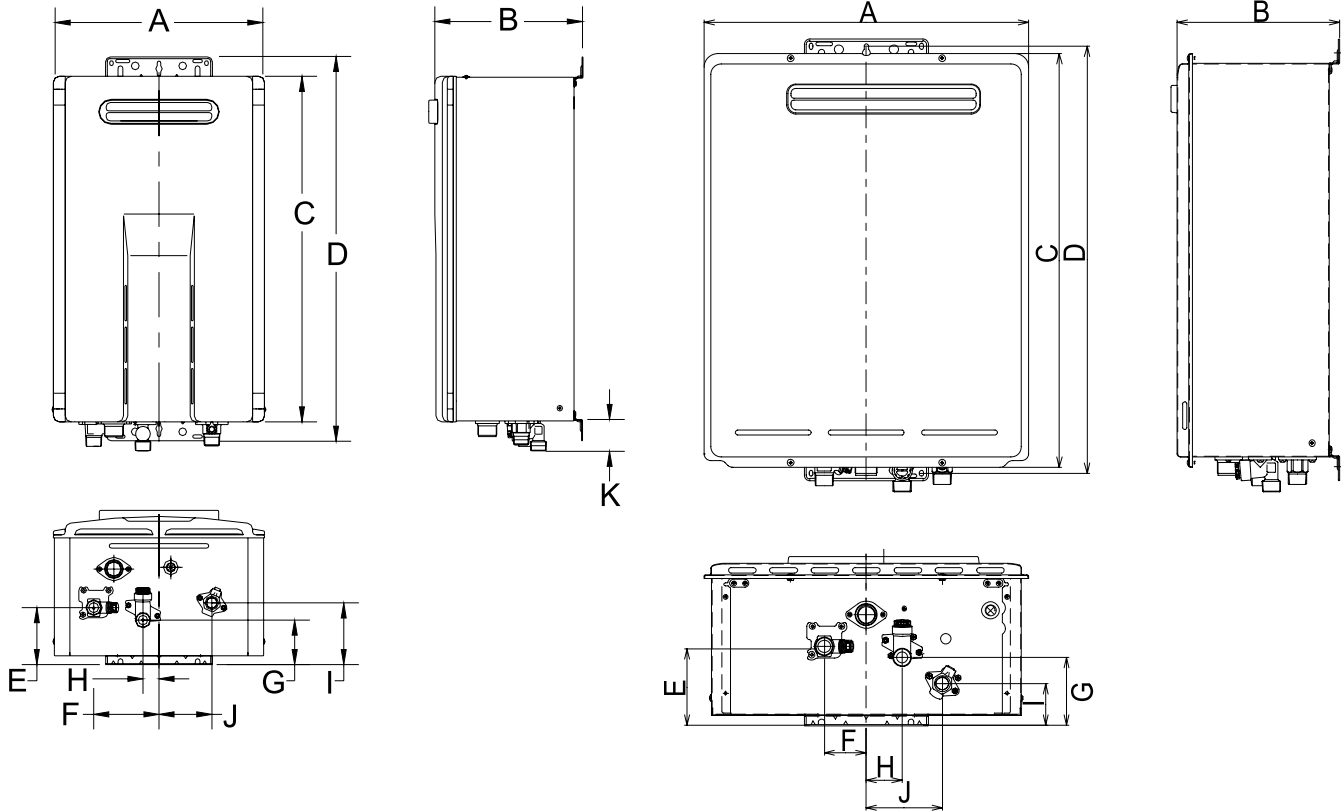
DIM	DESCRIPTION	305	705
		505 in (mm)	in (mm)
A	Width	14 (355.6)	18.5 (470)
B	Depth *	9.6 (244.5)	9.1 (230.5)
C	Height - Unit	22.9 (582)	23.6 (600)
D	Height - with brackets	25.5 (648.2)	25.2 (639.8)
E	Hot Water Outlet - from wall *	3.6 (91)	4.3 (110)
F	Hot Water Outlet - from center	4.3 (110)	2.4 (61)
G	Cold Water Inlet - from wall *	2.8 (70)	3.7 (94)
H	Cold Water Inlet - from center	1.1 (27)	2.0 (52)
I	Gas Connection - from wall *	4.3 (109)	2.2 (56.2)
J	Gas Connection - from center	3.5 (89)	4.3 (110)
K	From base to gas connection	1.6 (40)	1.6 (40)
	From base to cold connection	2.0 (50)	2.0 (50)
	From base to hot connection	1.6 (41)	1.6 (41)

\* This is the minimum dimension from the wall. The wall bracket is adjustable to allow an additional 1.57 inches (40 mm).

**EXTERIOR DIMENSIONS**

**305 and 505 Exterior Models**

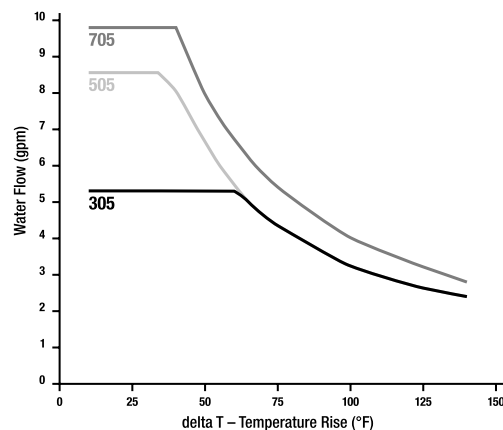
**705 Exterior Model**



DIM	DESCRIPTION	305	505	705
		<i>in (mm)</i>	<i>in (mm)</i>	<i>in (mm)</i>
A	Width	14 (355.6)	14 (355.6)	18.5 (470)
B	Depth	7.7 (196)	9.8 (249.5)	9.3 (230.5)
C	Height - Unit	19.8 (503)	22.9 (582)	23.6 (600)
D	Height - with brackets	22.5 (571)	25.4 (646.4)	25.2 (640)
E	Hot Water Outlet - from wall	3.4 (87)	3.8 (96)	4.5 (115)
F	Hot Water Outlet - from center	4.1 (105)	4.3 (110)	2.4 (61)
G	Cold Water Inlet - from wall	2.7 (68)	2.6 (75)	3.9 (99)
H	Cold Water Inlet - from center	0.4 (10)	1.1 (27)	2.0 (52)
I	Gas Connection - from wall	3.0 (77)	4.1 (104)	2.4 (61.2)
J	Gas Connection - from center	3.3 (83)	3.5 (89)	4.3 (110)
	From base to gas connection	1.6 (40)	1.6 (40)	1.6 (40)
K	From base to cold connection	2.0 (50)	2.0 (50)	2.0 (50)
	From base to hot connection	1.6 (41)	1.6 (41)	1.6 (41)

# SPECIFICATIONS

Model	305	505	705
Minimum Gas Consumption Btu/h	15,000		19,000
Maximum Gas Consumption Btu/h	199,000 Natural Gas 190,000 Propane Gas		237,000
Hot water capacity (Min - Max) *	0.6 - 5.3 GPM (2.3 - 20.1 L/min)	0.6 - 8.5 GPM (2.3 - 32.0 L/min)	0.6 - 9.8 GPM (2.3 - 37 L/min)
Interior Hot water capacity (45°F rise)	5.3 GPM (20.1 L/min)	7.4 GPM (28.0 L/min) Natural Gas 7.1 GPM (26.9 L/min) Propane Gas	8.8 GPM (33.5 L/min)
Exterior Hot water capacity (45°F rise)	5.3 GPM (20.1 L/min)	7.3 GPM (27.6 L/min)	8.7 GPM (33.1 L/min)
Default Temperature Setting (no controller)	120° F (49° C)		
Remote Controller Default Temperature Setting	104° F (40° C)		
Maximum Temp Setting (Commercial**)	160° F (71° C)	185° F (85° C)	
Maximum Temp Setting (Residential)	140° F (60° C)		
Minimum Temperature Setting	98° F (37° C)		
Weight	50 lb (23 kg)		55 lb (25 kg)
Interior Efficiency Rating	84%		
Interior Noise level	49 dB		
Interior Electrical Consumption	Normal	79 W	99 W
	Standby	2.8 W	2 W
	Anti-frost Protection	100 W	116 W
Exterior Efficiency Rating	83%		
Exterior Noise level	49 dB		
Exterior Electrical Consumption	Normal	55 W	72 W
	Standby	2.8 W	2 W
	Anti-frost Protection	100 W	116 W
By-Pass Control	Fixed	Electronic	
Minimum Gas Supply Pressure	Natural Gas	5.0 inch W.C.	
	Propane	8.0 inch W.C.	
Maximum Gas Supply Pressure	Natural Gas	10.5 inch W.C.	
	Propane	13.5 inch W.C.	
Interior Type of Appliance	Direct Vent, Temperature controlled continuous flow gas hot water system.		
Exterior Type of Appliance	Power Vent, Temperature controlled continuous flow gas hot water system.		
Operation	With or without remote controls, mounted in kitchen, bathroom, etc.		
Approved Gas Type	Natural Gas or Propane - Ensure unit matches gas type it's being installed on.		
Connections	Gas Supply: 3/4" MNPT, Cold Water Inlet: 3/4" MNPT, Hot Water Outlet: 3/4"		
Ignition System	Direct Electronic Ignition		
Electric Connections	Appliance: AC 120 Volts, 60Hz. Remote Control: DC 12 Volts (Digital)		
Water Temperature Control	Simulation Feedforward and Feedback.		
Water Supply Pressure	Minimum Water Pressure: 20 PSI (Recommended 30-80 PSI for maximum)		
Maximum Water Supply Pressure	150 PSI		
Remote Control Cable	Non-Polarized Two Core Cable (Minimum 22 AWG)		



\* Minimum flow may vary slightly depending on the temperature setting and the inlet water temperature.

\*\* For commercial and hydronic applications requiring higher temperatures

Specifications are subject to change without prior notice.

The maximum inlet gas pressure must not exceed the value specified by the manufacturer. The minimum value listed is for the purpose of input adjustment.

For more information on State On-Demand Water Heaters, contact:  
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July 2008R

SRGSS02007