

NHW-A Series



## NEW NHW-A Tankless Water Heaters

The first and only  
non-condensing tankless  
with ComfortFlow®  
built-in recirculation pump  
and buffer tank



# Introducing NHW-AI and NHW-AE

**COMFORTFLOW®**  
BUILT-IN PUMP & BUFFER TANK

**NAVITECH™**  
STAINLESS STEEL  
HX AND BURNER

**PREMIUM  
INTEGRATED  
CONTROL**

**0.81 UEF**

**98°-140°**  
TEMP RANGE

**UP TO 9.5 GPM**  
@ 35° TEMP RISE

**RESIDENTIAL &  
COMMERCIAL**

**CASCADE  
CAPABLE**



**NHW-AI**  
Interior



**NHW-AE**  
Exterior

One of the industry's most advanced non-condensing tankless water heaters

NHW-A is designed with the patented ComfortFlow® recirculation pump and buffer tank within the unit. This Navien exclusive innovation resolves the need for an external pump and controls because all the components and recirculation system controls are built-in. The ComfortFlow system also promotes consistent outlet temperature to minimize the "cold-water sandwich effect".



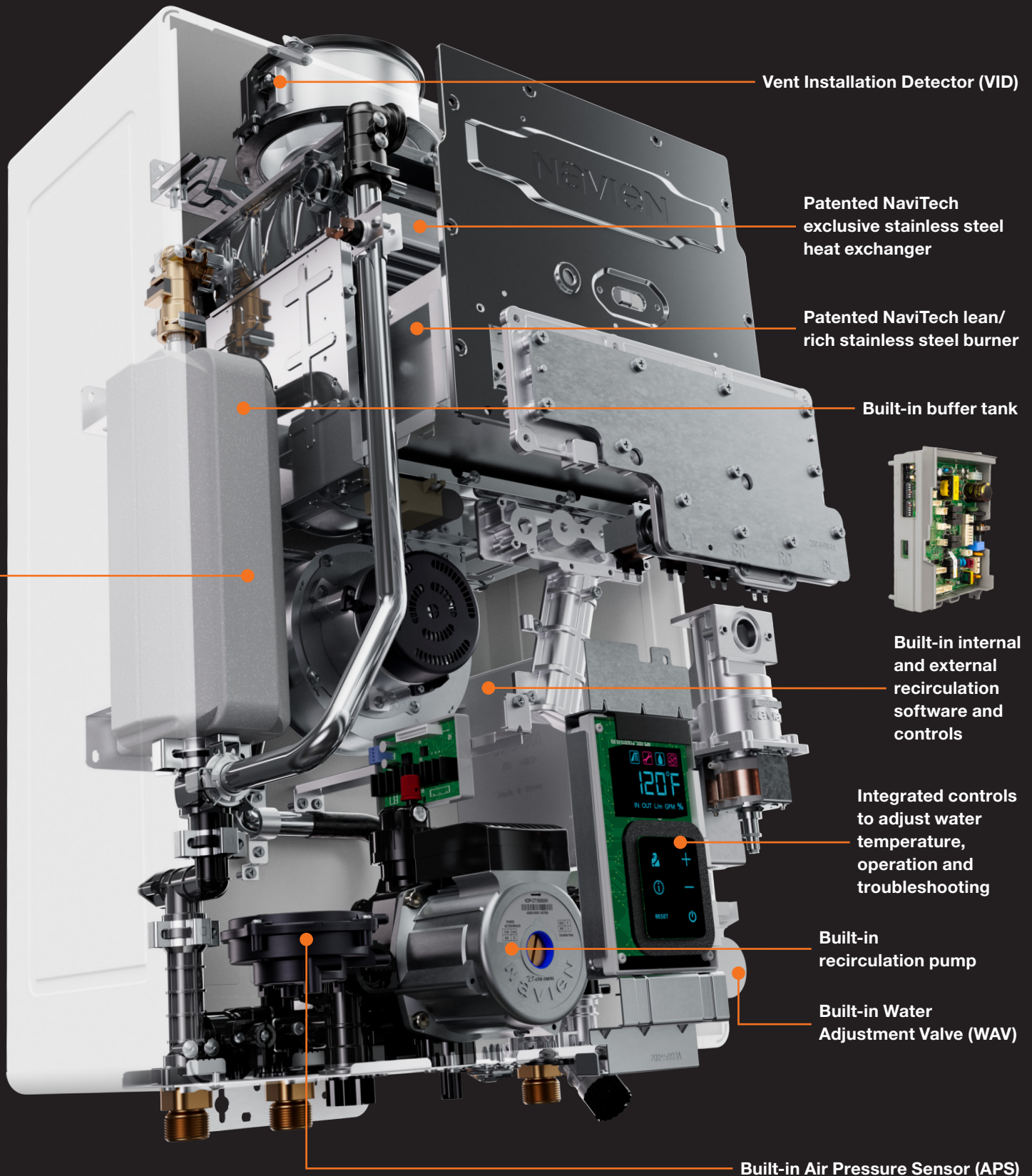
**ComfortFlow®**





# An inside look at the NHW-A

With features that make performance and functionality a priority



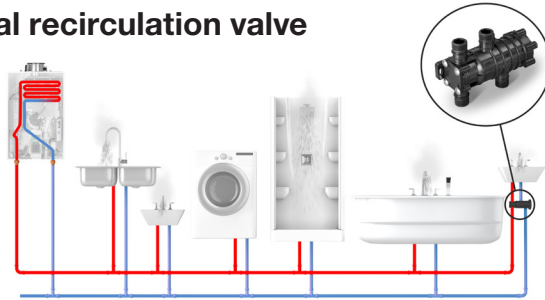
# More technology built-in with the ComfortFlow recirculation system

## Internal and external recirculation modes

All NHW-A models are available with built-in internal and external recirculation\* technology to program Always-On, Weekly\*\* or an Intelligent mode that learns hot water usage patterns. Selecting any of these options will save water by reducing wait time for hot water at a fixture.

## NaviCirc optional recirculation valve

Designed for recirculation in application where a dedicated return line is not available.



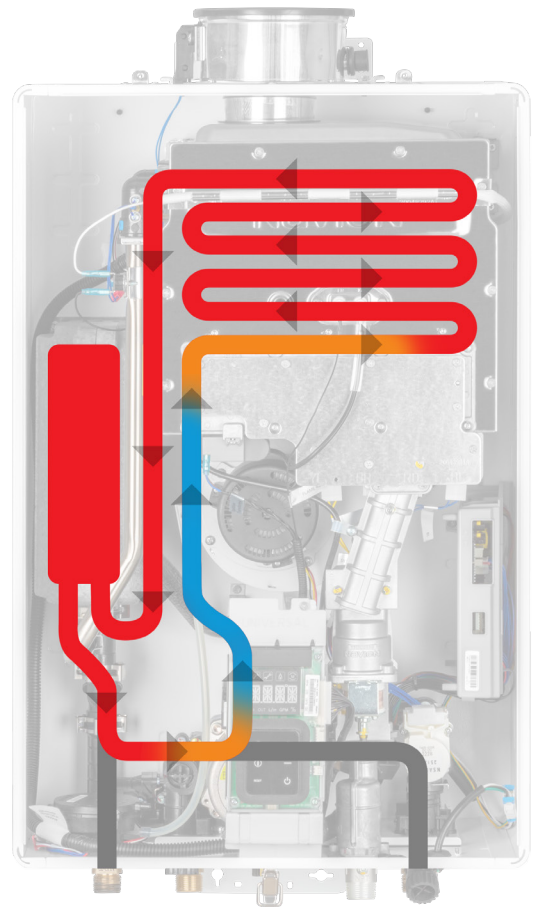
## HotButton optional on-demand system

At the push of a button, the HotButton system activates internal recirculation pump and gas fired burner to heat water in supply lines for faster hot water.



\* Recirculation applications may vary. Additional plumbing or equipment may be required.

\*\*Weekly requires the addition of the remote (included with NHW-AE, but optional with NHW-AI).



## More innovative features and benefits

- NaviVent System matched concentric 3" x 5" venting
- Approved for mobile/manufactured homes
- Available in 3 interior and 3 exterior models (160,000, 180,000 & 199,900 BTU/h)
- Navien designed and built
- Available in Natural Gas (NG) or Liquid Propane (LP) models
- Vent Installation Detector (VID) for superior safety

## NaviTech™

Durable stainless steel and a Navien-exclusive design contribute to NHW-A's dependability and performance.







Options to install outside or inside



Endless hot water



NaviLink optional WiFi remote control



Low NO<sub>x</sub> emissions



Up to 80%  
smaller than  
traditional  
tanks

Space saving and lightweight design



Cascading capability

# Accessories

For all optional accessories



NHW-AI



NHW-AE

**NaviVent**  
3" x 5"  
**Concentric Venting**  
**for NHW-AI Series**



For all venting  
accessories



**NaviLink® Wi-Fi Control**  
PBCM-AS-001



**NaviLink® Lite**  
**Wi-Fi Control (1 Unit)**  
PBCM-AS-002



**NaviCirc™ Recirculation Valve**

**NaviCirc™**  
PFFW-SXX-001

**NaviCirc™ Kit**  
30022965A



**Plumb Easy Valve Set (V2)**  
3/4" with Relief Valve  
GXXX002139

**For Pipe Cover**  
30012581A



**Pipe Cover NHW-A Series**  
30032304A



**H2Air™ Kit AHU Optimizer**  
PNBD-000001



**PeakFlow® Scale**  
**Prevention Systems**

**PeakFlow® A**  
GPWC310001AC001

**PeakFlow® S**  
GPWC110001AC001



**Recess Box (NHW-AE Only)**  
**(Lock not included)**  
30032303A



**HotButton™**  
**Control Kit**  
PZZZ-00046

**Wall Plate**  
GXXX001427

**Push Button**  
GXXX001426

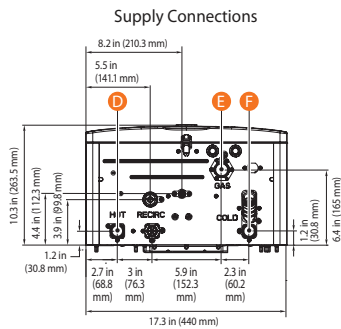
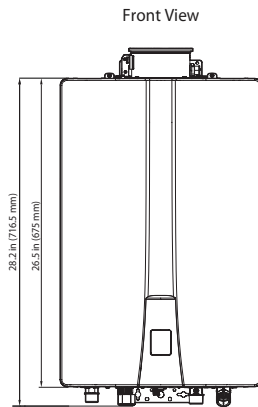
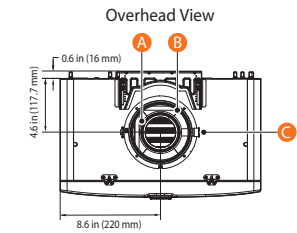


**Remote Controller (Optional**  
**for NHW-AI Models Only)**  
30022717B



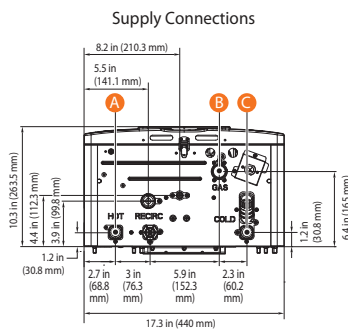
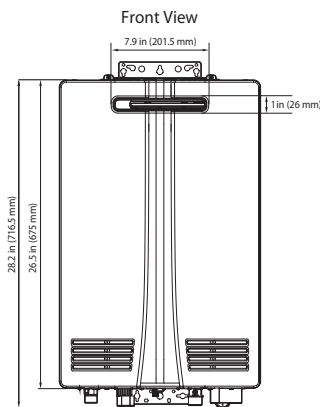
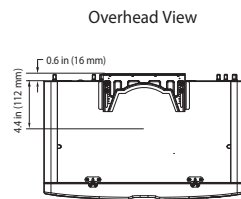
# Dimensions

## NHW-AI Series



Connection Size	
A Exhaust Gas Vent	Ø 3"
B Air Intake	Ø 5"
C Condensate Drain	Ø 5/8"
D Hot Water Outlet	Ø 3/4"
E Gas Inlet	Ø 3/4"
F Cold Water Inlet	Ø 3/4"

## NHW-AE Series



Connection Size	
A Hot Water Outlet	Ø 3/4"
B Gas Inlet	Ø 3/4"
C Cold Water Inlet	Ø 3/4"



## Customer support and advanced training makes Navien your best choice for tankless

Besides supplying innovative and energy efficient systems for residential and commercial applications, Navien provides extensive field support, webinars and training events for builders, architects and contractors. Our full-time customer support network provides quick answers to installation and operational questions.



# Ratings & Specifications

Item		NHW700 — Interior Model			NHW700 — Exterior Model		
		160AI	180AI	199AI	160AE	180AE	199AE
Heat capacity (input) natural gas/		10,700–160,000 (BTU/h)	10,700–180,000 (BTU/h)	10,700–199,900 (BTU/h)	10,700–160,000 (BTU/h)	10,700–180,000 (BTU/h)	10,700–199,900 (BTU/h)
Efficiency rating for NG & LP		0.81 UEF					
Flow rate (DHW)	35°F (18°C) temp rise	7.5 GPM (28 L/m)	8.5 GPM (32 L/m)	9.5 GPM (36 L/m)	7.5 GPM (28 L/m)	8.5 GPM (32 L/m)	9.5 GPM (36 L/m)
	45°F (23°C) temp rise	5.8 GPM (22 L/m)	6.6 GPM (25 L/m)	7.4 GPM (28 L/m)	5.8 GPM (22 L/m)	6.6 GPM (25 L/m)	7.4 GPM (28 L/m)
	67°F (36°C) temp rise	4.0 GPM (15 L/m)	4.6 GPM (17 L/m)	5.1 GPM (19 L/m)	4.0 GPM (15 L/m)	4.6 GPM (17 L/m)	5.1 GPM (19 L/m)
Dimensions		17.3" W x 26.5" H x 10.3" D					
Weight (gross) propane gas		60 lbs (27 kg)	65 lbs (29 kg)	65 lbs (29 kg)	60 lbs (27 kg)	65 lbs (29 kg)	65 lbs (29 kg)
Installation type		Indoor wall-hung			Outdoor wall-hung		
Venting type		Forced draft direct vent (indoor only)					
Ignition type		Electronic ignition					
Water pressure		15–150 PSI					
Natural gas supply pressure (from source)		3.5" WC–10.5" WC					
Propane gas supply pressure (from source)		8" WC–13" WC					
Natural gas manifold pressure (max-min)		2.8" WC, 0.7" WC	2.3" WC, 0.7" WC	2.8" WC, 0.7" WC	3.2" WC, 0.8" WC	2.6" WC, 0.8" WC	3.2" WC, 0.8" WC
Propane gas manifold pressure (max-min)		5.8" WC, 1.3" WC	4.5" WC, 1.3" WC	5.4" WC, 1.3" WC	6.1" WC, 1.4" WC	4.9" WC, 1.3" WC	6.0" WC, 1.3" WC
Minimum flow rate		0.4 GPM (1.5L/m) without ComfortFlow, <0.01 GPM (0.04 L/min) with ComfortFlow*					
Connection sizes		3/4" NPT cold water inlet 3/4" NPT hot water outlet 3/4" NPT gas inlet					
Power supply	Main supply	120V AC, 60 Hz					
	Normal	95 W	100 W	115 W	99 W	81 W	96 W
	Maximum power consumption	120 W (Max 2 A), 350 W (Max 4 A) with external pump connected					
	External pump	< 150 W, 1.5 A					
	Fuse	5.0 A					
Materials	Casing	Cold rolled carbon steel					
	Heat exchangers	Stainless steel					
Safety devices		Flame rod, APS, vent installation detector, ignition operation detector, water temperature high limit switch, power surge fuse					

\* Available for NHW-A models configured in an optional ComfortFlow® recirculation mode. Energy consumption will increase when the system is configured for recirculation. Navien reserves the right to change specifications at any time without prior notice. Please refer to [www.Navieninc.com](http://www.Navieninc.com) to verify you have the most current information.

## Warranty

Application		Labor	Parts	Heat Exchanger
Residential	Standard	1 year	5 years	15 years
	Uncontrolled recirculation <sup>2</sup>	1 year	3 years	5 years
Commercial or Combi <sup>1</sup>	Standard	1 year	5 years	5 years
	Uncontrolled recirculation <sup>2</sup>	1 year	3 years	3 years

<sup>1</sup> Combi refers to a combination potable water and space heating application. Water heaters cannot be used in space heating only applications.

<sup>2</sup> Uncontrolled-recirculation: External pumps configured to circulate continuously through the water heater are subject to the uncontrolled recirculation warranty terms. An aquastat is the minimum pump control requirement for DHW or storage tank recirculation in order to maintain the full controlled recirculation warranty.

Navien's warranty (which may be changed without prior notice) is subject to the terms and conditions found at [www.Navieninc.com](http://www.Navieninc.com).



We are @Navieninc everywhere



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