H₂Air system



H2Air Combination heating and DHW system





The Navien tankless water heater add-on accessory that creates an all-in-one hydronic forced-air heating and endless domestic hot water system

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Designed for both retrofit and new construction residential applications, Navien's H₂Air Kit* allows for forced-air space heating and DHW system integration between NPE-A2 Series tankless water heater models and a hydronic air handler. Also compatible with NPE-S2 and NPN (additional parts required). With H₂Air you will have a combination appliance that can provide endless domestic hot water and continuous space heating when sized correctly.

H₂Air is compatible with hydronic air handler models that require W1/W2/R terminals along with single or dual-stage thermostats[†]. The included Outdoor Reset Sensor provides optimum performance and efficiency for space heating.



Additional features

- DHW priority or simultaneous DHW and heating[‡]
- Endless supply of domestic hot water
- Adjustable outdoor temperature reset and heating set points
- Adjustable pump purge timer



H₂Air kit includes

- $\bullet \, \text{Controller}$
- 13-pin connector cable
- Outdoor temperature sensor
- Flow switch for DHW

A new use for the NPE-A2 tankless water heater integrated circulator

The H₂Air Kit utilizes the NPE-A2 built-in pump to circulate the hot water for the hydronic air handler. This eliminates the need to purchase an additional circulator for the heating system.

NPE-A2 condensing tankless is easy to sell, easy to install

Cuts installation time in half

Thanks to using 1/2" gas pipe (subject to local code) and 2" PVC venting, you can install a Navien tankless water heater in about half the time as competitive tankless heaters — about the same time as a traditional tank heater.

Fewer callbacks, longer life, faster heating

Navien was first to offer dual stainless steel heat exchangers, rather than copper, which extends the life by resisting corrosion.

Energy Star highly rated gas water heater

The NPE-A2 is one of the most energy efficient tankless water heater series in the industry. Our ultra condensing technology delivers cooled exhaust gas and high performance up to 0.95 UEF.





Note: H_2Air is for use with one NPE-A2 and one AHU only. For detailed information, refer to the AHU manufacturer's literature to determine the proper output capacity.

[†]Self-powered thermostats only.

 $^{\rm t}{\rm The \ control \ will automatically pause heating if the simultaneous DHW and heating loads exceed 85% of the water heater's capacity to ensure an uninterrupted supply of domestic hot water.$



Dimensions

Specifications for NPE-A with H₂Air.







	Item	Model				
	Item	NPE-180A2	NPE-210A2	NPE-240A2		
Heat capacity (input)	Natural gas	10,000–150,000 BTU/H	12.000-180.000 BTU/H	13,300–199,900 BTU/H		
	Propane gas		12,000-100,000 010/11			
Efficiency rating	UEF (NG & LP)	0.95	0.95	0.95		
Flow rate (DHW)	35°F (19°C) temp rise	8.4 GPM (32 L/m)	10.1 GPM (38 L/m)	11.2 GPM (42 L/m)		
	45°F (25°C) temp rise	6.5 GPM (25 L/m)	7.8 GPM (30 L/m)	8.7 GPM (33 L/m)		
	67°F (36°C) temp rise	4.3 GPM (16 L/m)	5.1 GPM (19 L/m)	5.6 GPM (21 L/m)		
Dimensions		17.3" (W) x 27.4" (H) x 13.2" (I	D)			
Weight		73 lbs (33kg)	77 lbs (35kg)	77 lbs (35kg)		
nstallation type		Indoor or outdoor wall-hung				
Venting type		Forced draft direct vent	Forced draft direct vent			
Ignition		Electronic ignition	Electronic ignition			
Water pressure		15–150 PSI	15–150 PSI			
Natural gas supply pressure (from source)		3.5"-10.5" WC	3.5"-10.5" WC			
Propane gas supply pressure (from source)		8"–13" WC				
Natural gas manifold pressure (min-max)		-0.03" WC to -0.55" WC	-0.03" WC to -0.76" WC	-0.03" WC to -0.96" WC		
Propane gas manifold pressure (min-max)		-0.03" WC to -0.40" WC	-0.02" WC to -0.76" WC	-0.02" WC to -0.96" WC		
Minimum flow rate		0.5 GPM (1.9 L/m)	0.5 GPM (1.9 L/m)			
Connection sizes	Cold water inlet	3/4" NPT	3/4" NPT			
	Hot water outlet	3/4" NPT	3/4" NPT			
	Gas inlet	3/4" NPT	3/4" NPT			
Power supply	Main supply	120V AC, 60 Hz	120V AC, 60 Hz			
	Maximum power consumption	200W (max 2A), 350W (max 4	200W (max 2A), 350W (max 4A) with external pump connected			
Materials	Casing	Cold rolled carbon steel	Cold rolled carbon steel			
	Heat exchangers	Primary heat exchangers: stain	Primary heat exchangers: stainless steel, secondary heat exchangers: stainless steel			
Venting	Exhaust		2" or 3" PVC, CPVC, approved polypropylene and stainless steel 2" or 3" special gas vent type BH (Class II, A/B/C)			
	Intake		2" or 3" PVC, CPVC, approved polypropylene and stainless steel 2" or 3" special gas vent type BH (Class II, A/B/C)			
	Vent clearances	O" to combustibles	0" to combustibles			
Safety devices	Flame rod, APS, ignition operation de exhaust temperature high limit senso	etector, water temperature high limit s	switch,			

Note: H₂Air is for use with one NPE-A2 and one AHU only. For detailed information, refer to the AHU manufacturer's literature to determine the proper output capacity. Internal or external circulation modes typically available on the NPE-A2 models are no longer available when the H₂Air application is installed.

Accessories

@ 3/4"

G Cold Water Inlet

H2Air Kit AHU Optimizer PNBD-000001	NaviLink™ Wi-Fi Control PBCM-AS-001	NPE-A/NPE-A2 Plumb Easy 3 Valve Set (V2) GXXX002140	Residential Neutralizer (V2) (1 unit) GXXX002212
			Residential Replacement Media GXXX001323

NPE-A2 warranty

Commercial or Combi*	Labor	Parts	Heat exchanger
Standard or controlled recirculation	1 year	5 years	8 years
Uncontrolled recirculation	1 year	3 years	3 years

LEADER

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"Combi" refers to a combination potable water & space heating application. Water heaters cannot be used in space heating only applications.

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CONDENSING

ТНЕ

TECHNOLOGY