

NPE-2 Series Tankless Water Heaters

Specification Sheet

Premium Condensing Tankless Gas Water Heater

- Certified design according to the latest **ANSI Z21.10.3 - CSA 4.3** standards for both indoor and outdoor installations (with optional Outdoor Vent Kit)
- Compatible with **1/2"** gas pipe up to **24 ft*** equivalent length (*see Installation Manual for additional information)
- Compatible with **2"** PVC vent up to **75 ft**** and **3"** Vent up to **150 ft**** (**with no elbows)
- Designed for use in **Residential and Commercial** applications (see below for available models and warranty terms)
- Gas Input Range

NPE-150S2 - 120,000 to 18,000 BTU/h
NPE-180A2/S2 - 150,000 to 10,000 BTU/h
NPE-210A2/S2 - 180,000 to 12,000 BTU/h
NPE-240A2/S2 - 199,900 to 13,300 BTU/h

- Hot Water Flow Rate Capacity (*based on 35°F temperature rise)

NPE-150S2 - 6.8 GPM
NPE-180A2/S2 - 8.4 GPM
NPE-210A2/S2 - 10.1 GPM
NPE-240A2/S2 - 11.2 GPM

- TDR (Turndown Ratio)** up to **15:1**
- Dual Primary and Secondary Stainless Steel Heat Exchangers** for optimum efficiency and durability
- Built-In Advanced Multi-Line Control Panel with Setup Wizard** allows adjustment of temperature settings and displays of operating status and error codes

- ComfortFlow⁺ Technology** - NPE-A2 models come with built-in 0.5 gallon Buffer Tank and Recirculation Pump to provide maximum hot water comfort (NaviCirc Crossover Valve optional)

- INTELLIGENT Preheating** - recognizes hot water usage patterns to intelligently provide hot water to fixtures when needed

- Temperature Options** - available temperature settings for Residential applications range from **97°F** p to **140°F** with high-temperature Commercial mode capable of up to **185°F**

- Ready-Link Cascade Compatible** for up to 32 units for increased hot water production

- Common Vent Compatible** - allows for cascade systems to use a single exhaust and/or intake pipe for up to **12 units** with the use of the Common Vent Backflow Damper Collar Kit (#30014367A)

- Compatible with **Navilink⁺ Wi-Fi Control** (#PBCM-AS-001)

- Freeze Protection** - maintains normal operation in cold weather conditions when the unit is installed **INDOORS** and connected to power. For **OUTDOOR** installations: the ambient temperature at the installation location must be above **32°F (0°C)** and below **125°F (52°C)**

Note Refer to the Installation Manual for additional Freeze Protection guidelines

- Uniform Energy Factor** (listed models for use with Natural Gas and Propane)

NPE-150S2 - 0.93 UEF
NPE-180A2/210A2/240A2 - 0.95 UEF
NPE-180S2/210S2/240S2 - 0.96 UEF

- Compatible for use with **Natural Gas (NG)** and **Propane (LP) Gas***** (***) requires installation of included Gas Conversion Kit by a qualified gas servicer)

- Approved for installations on **Manufactured Homes**

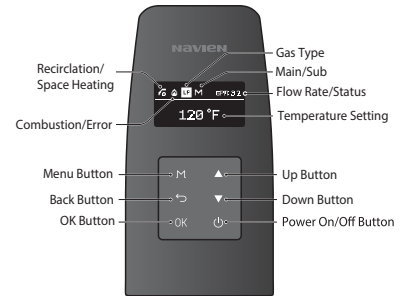
- Certified by **CSA Group, NSF 5 and 372 Low Lead, AHRI Certified, SCAQMD** (Rule 1146.2 Type 1 - Complies with 14 ng/l or 20 ppm NOx @ 3% O2)

- Limited Warranty - 15-Year Heat Exchanger and 5-Year Parts (Residential)******
8-Year Heat Exchanger and 5-Year Parts (Commercial)****
 (**** full details of warranty terms available in the Navien manuals or website)

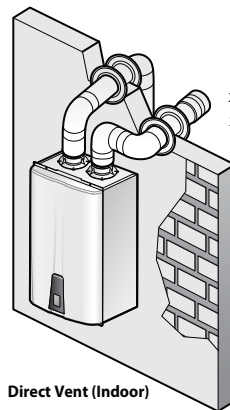
- Optional Accessories** are available (see below)



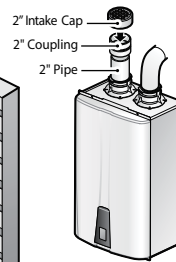
Certified Design Compatible with
2" PVC and 1/2" Gas Pipe



Multi-Line Control Panel with Diagnostics



Direct Vent (Indoor)



Non-Direct Vent (Indoor)

Indoor and Outdoor Venting Options



Non-Direct Vent (Outdoor)



* NPE-150S2 Excluded



Job Name: _____

Location: _____



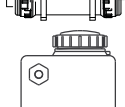
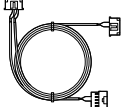
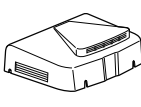
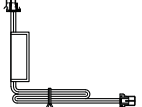
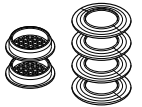
Engineer: _____

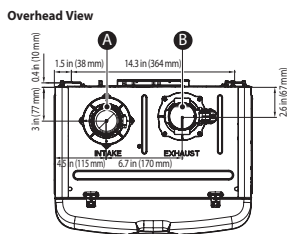
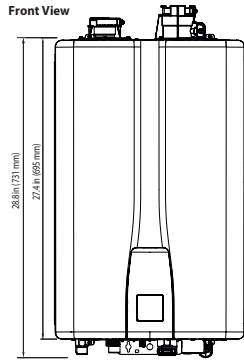
Wholesaler: _____

Contractor: _____

Model No.: _____

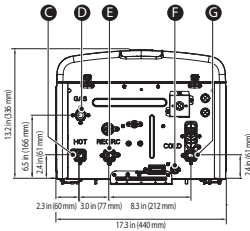
Submitted to: _____

						
Remote Controller (30022717B)	Plumb Easy Valve Set (3/4") (30009323A - Lead Free) (30025812A - for Pipe Cover)	Condensate Neutralizer (GXXX001322 - Single Unit) (GXXX001324 - Up to 6 Units) (GXXX001325 - Up to 16 Units)	Ready-Link Communication Cable (GXXX000546)	NPE-2 Outdoor Vent Kit (30025801A)	External Pump Wire (GXXX001319)	3" Vent Termination Caps and Wall Flanges (GXXX3873B)



Supply Connections

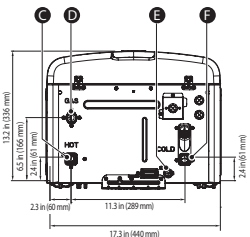
Description	Diameter
A Air Intake	2 in
B Exhaust Gas Vent	2 in
C Hot Water Outlet	3/4 in
D Gas Inlet	3/4 in
E Recirculation Inlet	3/4 in
F Condensate Outlet	1/2 in
G Cold Water Inlet	3/4 in



NPE-180A2 / 210A2 / 240A2

Supply Connections

Description	Diameter
A Air Intake	2 in
B Exhaust Gas Vent	2 in
C Hot Water Outlet	3/4 in
D Gas Inlet	3/4 in
E Condensate Outlet	1/2 in
F Cold Water Inlet	3/4 in



NPE-150S2 / 180S2 / 210S2 / 240S2

Item	NPE-150S2*	NPE-180A2	NPE-180S2	NPE-210A2	NPE-210S2	NPE-240A2	NPE-240S2
Heat Capacity (Input)	Natural Gas, Propane Gas 18,000-120,000 BTU/H	10,000-150,000 BTU/H		12,000-180,000 BTU/H		13,300-199,900 BTU/H	
Uniform Energy Factor	UEF (for NG & LP) 0.93	0.95	0.96	0.95	0.96	0.95	0.96
Flow Rate (DHW)	35 °F (19 °C) Temp Rise	6.8 GPM (25.8 L/m)	8.4 GPM (32 L/m)		10.1 GPM (38 L/m)		11.2 GPM (42 L/m)
	45 °F (25 °C) Temp Rise	5.3 GPM (20 L/m)	6.5 GPM (25 L/m)		7.8 GPM (30 L/m)		8.7 GPM (33 L/m)
	67 °F (36 °C) Temp Rise	3.4 GPM (13 L/m)	4.3 GPM (16 L/m)	4.4 GPM (17 L/m)	5.1 GPM (19 L/m)	5.3 GPM (20 L/m)	5.6 GPM (21 L/m)
Dimensions	17.3 in (W) x 27.4 in (H) x 13.2 in (D)						
Weight	62 lbs (28 kg)	73 lbs (33 kg)	68 lbs (31 kg)	77 lbs (35 kg)	73 lbs (33 kg)	77 lbs (35 kg)	73 lbs (33 kg)
Installation Type	Indoor or Outdoor Wall-Hung						
Venting Type	Forced Draft Direct Vent						
Ignition	Electronic Ignition						
Water Pressure	15-150 PSI						
Natural Gas Supply Pressure (from source)	3.5 in WC-10.5 in WC						
Propane Gas Supply Pressure (from source)	8 in WC-13 in WC						
Natural Gas Manifold Pressure (min-max)	-0.04 in WC - -0.40 in WC	-0.03 in WC - -0.55 in WC		-0.03 in WC - -0.76 in WC		-0.03 in WC - -0.96 in WC	
Propane Gas Manifold Pressure (min-max)	-0.03 in WC - -0.40 in WC	-0.02 in WC - -0.55 in WC		-0.02 in WC - -0.76 in WC		-0.02 in WC - -0.96 in WC	
Minimum Flow Rate	0.5 GPM (1.9 L/m), < 0.01 GPM (0.04 L/m) option for "A2" models**						
Connection Sizes	Cold Water Inlet	3/4 in NPT					
	Hot Water Outlet	3/4 in NPT					
	Gas Inlet	3/4 in NPT					
Power Supply	Main Supply	120 V AC, 60 Hz					
	Maximum Power Consumption	200 W (max 2 A), 350 W (max 4 A) with external pump connected					
Materials	Casing	Cold Rolled Carbon Steel					
	Heat Exchangers	Primary Heat Exchanger: Stainless Steel Secondary Heat Exchanger: Stainless Steel					
Venting	Exhaust	2 in or 3 in PVC, CPVC, Approved Polypropylene and stainless steel 2 in or 3 in Special Gas Vent Type BH (Class II, A/B/C)					
	Intake	2 in or 3 in PVC, CPVC, Approved Polypropylene and stainless steel 2 in or 3 in Special Gas Vent Type BH (Class II, A/B/C)					
	Vent Clearances	0 in to combustibles					
High Elevation	10,100 feet for both NG or LP gas. Please refer to Installation Manual for additional details and instructions.						
Safety Devices	Flame Rod, APS, Ignition Operation Detector, Water Temperature High Limit Switch, Exhaust Temperature High Limit Sensor, Power Surge Fuse, Burner High Limit Fuse, Vent Installation Detector (VID)						

*NPE-150S2 model not certified by EnergyStar

** Available for "A2" models configured in an optional ComfortFlow recirculation mode. Energy consumption will increase when the system is configured for recirculation.

Gas-fired, tankless, condensing, wall-mounted water heater(s) shall be direct vent NPE-2 Series models as manufactured by Navien, Inc. and are certified by CSA Group to the latest edition of ANSI Standard Z21.10.3-CSA 4.3. Water heater(s) shall have a 15(5)-year limited Heat Exchanger warranty and 5(3)-year limited Parts warranty (8(5)-year Heat Exchanger and 5(3)-year Parts for Commercial use) per Navien Limited Warranty. Unit(s) shall be designed to burn natural gas and can be for use with propane when a Gas Conversion Kit is installed. _____ (qty). NPE water heater(s) shall have a nominal flow rate capacity of _____ GPM/GPH at _____ °F rise with rated input of _____ BTU/hr. Water heater(s) shall be vented with 2" Schedule 40/80 PVC/CPVC, approved polypropylene and stainless steel vent pipe at a distance not to exceed 75' (or equivalent) with each elbow equal to 8' of pipe length or 3" Schedule 40/80 PVC/CPVC, approved polypropylene and stainless steel vent pipe at a distance of 150' (or equivalent) with each elbow equal to 5' of pipe length. Water heater(s) is rated for 150 PSI working water pressure and 300 PSI test pressure. Gas supply pressure shall be 3.5" to 10.5" WC for natural gas and 8.0" to 13.0" WC for propane. Unit(s) shall have a steel case, dual stainless steel heat exchangers, eco premixed burner, negative pressure gas valve, dual venturi, 3/4" inlet gas connection, 3/4" brass inlet/outlet water connections, water holding capacity of 0.6 gallons for the NPE-150S2, 1.0 gallon for the NPE-180A2 model (0.7 gallons for NPE-180S2 model), 1.2 gallons for the NPE-210A2/NPE-240A2 models (0.7 and 0.9 gallons for NPE-210S2 and NPE-240S2 models respectively), and a condensate collector. The NPE-180A2 model weighs 73 lbs (NPE-180S2 weighs 68 lbs), and the NPE-210A2/NPE-240A2 models weigh 77 lbs (NPE-210S2 and NPE-240S2 weigh 73 lbs) and the NPE-150S2 weigh 62lbs. Unit(s) shall include features such as an adjustment for installations at high elevation, temperature lockout, and temperature options from 97-120°F in 1°F intervals and 120-140°F in 1°F intervals. The unit(s) shall include additional temperature options of 140-185°F in 1°F intervals, for high temperature commercial applications. All NPE "A2" models shall include an internal circulation pump and 0.5-gallon buffer tank. The water heater(s) shall be controlled by an internal circuit board that monitors the inlet and outlet temperatures with installed thermistors, sensing and controlling flow rate to set point temperature with air-fuel ratio controls in order to maintain thermal combustion efficiency. Unit(s) shall include safety features such as flame sensor system, high limit sensors, overheat prevention device, freeze protection mode, and fan motor rotation detector. Multi-system (cascade) applications that require 2 to 32 units shall be installed by connecting the units using cable only connections (Ready Link). The water heater(s) exceeds the energy efficiency requirements of ASHRAE 90.1-2010 and is listed by SCAQMD Rule 1146.2 (Type 1) as compliant with Rule 1146.2 (Type 1) for Ultra Low NOx requirements of 14 ng/J or 20 ppm @ 3% O2.

* Navien reserves the right to change specifications at any time without prior notice