

- Certified design according to **ANSI Z21.13-2013/CSA 4.9-2013** standards for indoor residential applications
- Gas Input Ranges
 - NHB-055** - 55,000 to 8,000 BTUh
 - NHB-080** - 80,000 to 8,000 BTUh
 - NHB-110** - 110,000 to 10,000 BTUh
 - NHB-150** - 150,000 to 10,000 BTUh
- **Turndown Ratio (TDR)** of up to 15:1 - *one of the highest in its product class*
- **Dual Primary and Secondary Stainless Steel Heat Exchangers** for optimum efficiency and durability
- Compatible with **2" PVC vent up to 60 ft*** and **3" PVC vent up to 150 ft*** (* with no elbows)
- **Backlit Front Panel** - allows adjustment of hot water temperatures and boiler functions including Outdoor Reset Curve settings, pump operation, Integrated Low Water Safety Control, indirect DHW priority, and unit output capacity
- **Low Voltage Terminal Strip** - contacts for thermostat or zone controller, indirect DHW tank thermostat, outdoor reset, 24 VAC device relay, air handler interrupt, and LWCO
- **High Voltage Terminal Strip** - 120V contacts for use with boiler, system, and DHW pump wiring** (** 2A max per pump)
- **Temperature Options** - two boiler operating setpoints: hydronic heating temperature and DHW (indirect) settings range from **77°F (25°C) up to 194°F (90°C)**
- **Outdoor Reset Sensor** (included) - the unit controls will sense outdoor ambient temperatures and adjust the boiler operation for maximum comfort and efficiency
- **External System Supply & Return Sensors** (optional) - additional controls provide optimum system performance
- **AFUE Ratings**
NHB-055/080/110/150 - 95.0% (NG/LPG)
- Compatible with **Natural Gas (NG)** and **Propane (LPG)***** (***) requires installation of included Field Conversion Kit by a qualified gas servicer)
- Certified by **CSA, ASME, SCAQMD** (Rule 1146.2 Type 1 - Complies with 14 ng/J or 20 ppm NOx @ 3% O2)
- **15-Year Heat Exchanger and 5-Year Parts Warranty (Residential)**
10-Year Heat Exchanger and 3-Year Parts Warranty (Commercial)**** (***) see Navien Limited Warranty)
- **Optional accessories** are available (*see below*)



Sleek Design - Compatible with 2" PVC Vent



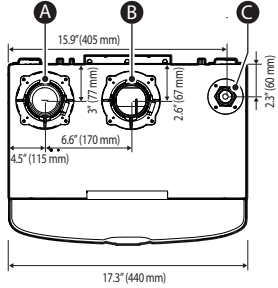
INCLUDED Illuminated Front Panel with Advanced Hydronic Operation



NHB Manifold Kit - Primary (GFFM-MSOZUS-001)	NHB Manifold Kit - Secondary (GFFM-SKTZUS-001)	Plumb Easy Valve Set (BCSA0563 - 1" Standard)	Condensate Neutralizer (GXXX001322 - Single Unit) (GXXX001324 - Up to 6 Units) (GXXX001325 - Up to 16 Units)	Zone Pump Controller (FMZ-20 - For 2 Zones) (FMZ-30 - For 3 Zones) (FMZ-40 - For 4 Zones) (FMZ-60 - For 6 Zones)	System Supply/Return Sensors (GXXX001417)

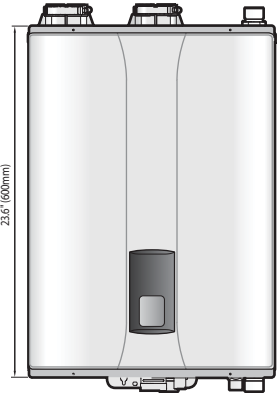
Dimensions

Overhead View

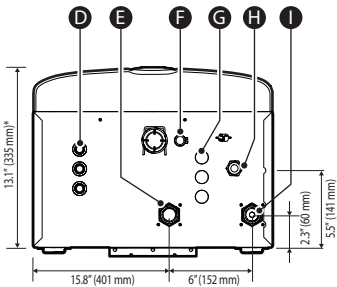


- Connection Size**
- A** Air Intake \varnothing 2"
 - B** Exhaust Gas Vent \varnothing 2"
 - C** Air Vent Connection \varnothing 3/4"

Front View



Supply Connections



* NHB-055/080: 11.8" (300 mm)

- Connection Size**
- D** Rubber Grommet \varnothing 1"
 - E** Space Heating Return \varnothing 1"
 - F** Condensate Outlet \varnothing 1/2"
 - G** Knock Out Hole \varnothing 3/4"
 - H** Gas Connection \varnothing 3/4"
 - I** Space Heating Supply \varnothing 1"

Navien Condensing Boiler Space Heating Ratings



Model Number ¹	Heating Input, MBH		Heating Capacity ² , MBH	Net AHRI Rating, Water ³ , MBH	AFUE ² , %
	Min	Max			
NHB-055	8	55	51	44	95.0
NHB-080	8	80	74	64	95.0
NHB-110	10	110	102	89	95.0
NHB-150	10	150	138	120	95.0

¹ Ratings are the same for Natural Gas models converted to Propane use.

² Based on U.S. Department of Energy (DOE) test procedures.

³ The NET AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15. Consult Navien before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

Specifications

Item	NHB-055	NHB-080	NHB-110	NHB-150
Dimensions	24in. (H) x 17in. (W) x 12in. (D)		24in. (H) x 17in. (W) x 13in. (D)	
Weight	73 lb (33 kg)		80 lb (36 kg)	
Installation Type	Indoor Wall-Hung			
Venting Type	Forced Draft Direct Vent			
Ignition	Electronic Ignition			
Natural Gas Supply Pressure (from source)	3.5 in.-10.5 in. WC			
Propane Gas Supply Pressure (from source)	8.0 in.-13.5 in. WC			
Natural Gas Manifold Pressure	-0.03 in. WC	-0.08 in. WC	-0.10 in. WC	-0.40 in. WC
Propane Gas Manifold Pressure	-0.03 in. WC	-0.07 in. WC	-0.09 in. WC	-0.30 in. WC
Gas Connection Size	3/4 in. NPT (female)			
Power Supply	Main Supply	120V AC, 60Hz		
	Maximum Power Consumption	Less than 10A		
Materials	Casing	Cold-rolled carbon steel		
	Heat Exchangers	Primary and Secondary: Stainless Steel		
Venting	Exhaust	2 in. or 3 in. PVC, CPVC, approved polypropylene* (* see <i>Installation Manual for more details</i>) 2 in. or 3 in. Special Gas Vent Type BH (Class III, A/B/C)		
	Intake	2 in. or 3 in. PVC, CPVC, polypropylene 2 in. or 3 in. Special Gas Vent Type BH (Class III, A/B/C)		
	Vent Clearance	0 in. to combustibles		
Safety Devices	Flame Rod, APS, Gas Valve Operation Detector, Ignition Operation Detector Water Temperature High Limit Switch, Exhaust Temperature High Limit Sensor			