KD NAVIEN

QuickFacts

NHB Series
Condensing Boilers

Navien certification summary

	Model			
	NHB-55	NHB-80	NHB-110	NHB-150
Product Approvals				
CSA	Yes	Yes	Yes	Yes
SCAQMD 1146.2 (NOx, <20 ppm)	Yes	Yes	Yes	Yes
ASME	Yes "H" stamp	Yes "H" stamp	Yes "H" stamp	Yes "H" stamp
AHRI Number	7501495	7501496	7501497	7501498
Energy Star	Yes	Yes	Yes	Yes
Space Heating Ratings				
AFUE, %	95.0	95.0	95.0	95.0
Heating Capacity, MBH	51	74	102	138

Gas input ranges

Model	Range (BTU/H)	TDR
NHB-55	8,000–55,000	7.1
NHB-80	8,000–80,000	10.1
NHB-110	10,000–110,000	11.1
NHB-150	10,000–150,000	15.1

Warranty

Type	Residential*	Commercial
Heat Exchangers	15 year limited warranty	10 year limited warranty
Parts	5 years	3 years
Labor	1 year	1 year

*Applies to single family residential locations.
For complete details please refer to the full warranty at NavienInc.com.

Product features

TDR UP TO 15:1 — Industry's largest turn down ratio

AFUE 95.0% — Recognized as the most efficient in 2019 by Energy Star

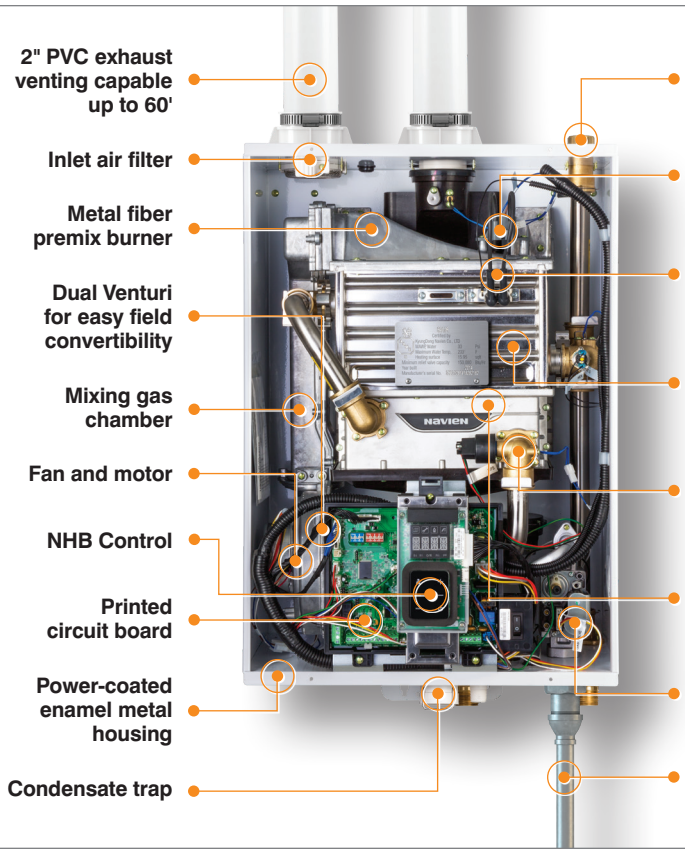
2"–3" VENTING LONG DISTANCES — 2" PVC venting up to 60' 3" PVC venting up to 150'

ADJUSTABLE DELTA T RANGES — Gives the installer the ability to maximize boiler performance and temperature control.

NHB CONTROL — Smart integrated control provides industry-leading options and features in the boiler operation parameters

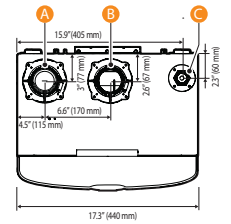
Most Efficient 2019 ENERGY STAR www.energystar.gov

NHB: the inside story



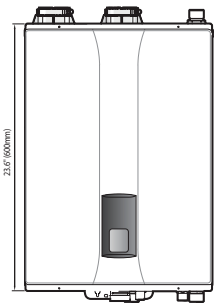
Dimensions

Overhead View

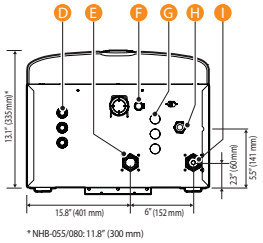


Connection Size	
A Air Intake	Φ 2"
B Exhaust Gas Vent	Φ 2"
C Air Vent Connection	Φ 3/4"

Front View



Supply Connections



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

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

Ratings & specifications

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-55	8	55	51	44	95.0
NHB-80	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.

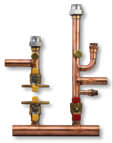
Specifications

Item		NHB-55	NHB-80	NHB-110	NHB-150
Dimensions		24" (H) x 17" (W) x 12" (D)		24" (H) x 17" (W) x 13" (D)	
Weight		73 lbs (33 kg)		80 lbs (36 kg)	
Installation type		Indoor wall-hung			
Venting type		Forced draft direct vent			
Ignition		Electronic ignition			
Natural gas supply pressure (from source)		3.5" – 10.5" WC			
Propane gas supply pressure (from source)		8.0" – 13.5" WC			
Natural gas manifold pressure		-0.03" WC	-0.08" WC	-0.10" WC	-0.40" WC
Propane gas manifold pressure		-0.03" WC	-0.07" WC	-0.09" WC	-0.30" WC
Gas connection size		3/4" 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 heat exchangers: stainless steel			
Venting	Exhaust	2" or 3" PVC, CPVC, PP, SS (see installation manual for more details) 2" or 3" special gas vent type BH (Class III, A/B/C)			
	Intake	2" or 3" PVC, CPVC, PP, SS 2" or 3" special gas vent type BH (Class III, A/B/C)			
	Vent clearances	0" to combustibles			
Safety devices		Flame rod, APS, gas valve operation detector, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor			

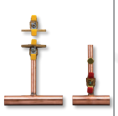
Navien reserves the right to change specifications at any time without prior notice.
Please refer to NavienInc.com to verify you have the most current information.

Accessories

NaviLink™ Wi-Fi Control
PBCM-AS-001



NHB Primary Manifold Kit
GFFM-MSOZUS-001



NHB Secondary Manifold Kit
GFFM-SKTZUS-001

Plumb Easy Valve Set
1" Standard
BCSA056

Residential Neutralizer
(1 unit)
GXXX001322
Residential Replacement Media
GXXX001323

Light Commercial Neutralizer
(up to 6 units)
GXXX001324
Light Commercial Replacement Media
GXXX001328

Commercial Neutralizer
(up to 16 units)
GXXX001325
Commercial Replacement Media
GXXX001329

NaviClean™ Magnetic Filter
GXXX001727

Zone Pump Controller
2 Zones:
PFMZ-02P-001
3 Zones:
PFMZ-03P-001
4 Zones:
PFMZ-04P-001
6 Zones:
PFMZ-06P-001

System Supply & Return Sensors
GXXX001417

Common Vent Collar Kit
30014367A
Cascade Cable
GXXX000546

Ready-Link® Rack Base (V2)
GFFM-KDIZUS-003
Ready-Link® Rack Add-on (V2)
GFFM-KDIZUS-004

AHRI CERTIFIED

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NHB-QF002-1810

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