

NHB Series



NHB High Efficiency Condensing Boilers

Navien innovation
available in a
space-saving
wall-hung boiler



NaviLink Wi-Fi remote control system...
available as an add-on accessory.



Navien NHB Series condensing boilers

As the leader in condensing technology, Navien reinvented the water heating industry with the award-winning NPE tankless water heaters and the NCB-E combi-boilers. Navien's tradition of innovation continues with the NHB series high efficiency condensing boilers. All NHB boilers have Navien's advanced burner system, an AFUE of 95.0% and industry-leading turndown ratios up to 15:1. The NHB boiler is available in four sizes: 55,000 BTU/H, 80,000 BTU/H, 110,000 BTU/H and 150,000 BTU/H.

Space saving



The sleek wall-hung design uses much less space than traditional floor standing boilers.

Easy to install



1/2" gas connections (subject to local code) and 2" PVC venting help reduce installation time.

Total control



All system setup, operations and troubleshooting available at your fingertips.

TDR UP TO 15:1

Industry's largest turndown ratio allows boiler to fire at highest operational efficiencies without frequent on and off cycling.

AFUE 95.0%

AFUE 95.0% - Energy Star certified.

2" - 3" VENTING LONG DISTANCES

2" or 3" PVC, CPVC, PP and SS (see installation manual for more details).
2" or 3" special gas vent type BH (Class III, A, B, C).

ADJUSTABLE DELTA T RANGES

Gives the installer the ability to maximize boiler performance and temperature control.

CASCADE UP TO 16 UNITS

The cascading feature for 110 and 150 models will enable 1-16 units based on demand and balance workload for longer life.

NHB CONTROL

The smart integrated control provides industry-leading options and features in the boiler operation parameters, including:

- Adjustable heat capacity
- A timed hydronic supply water boost feature
- Adjustable anti-cycle timer
- Freeze protection
- Pressure LWCO with manual reset
- Adjustable minimum burner time setting
- Adjustable turndown ratio timing
- Outdoor reset and domestic hot water priority
- Adjustable outdoor temperature reset curves
- Field gas convertible

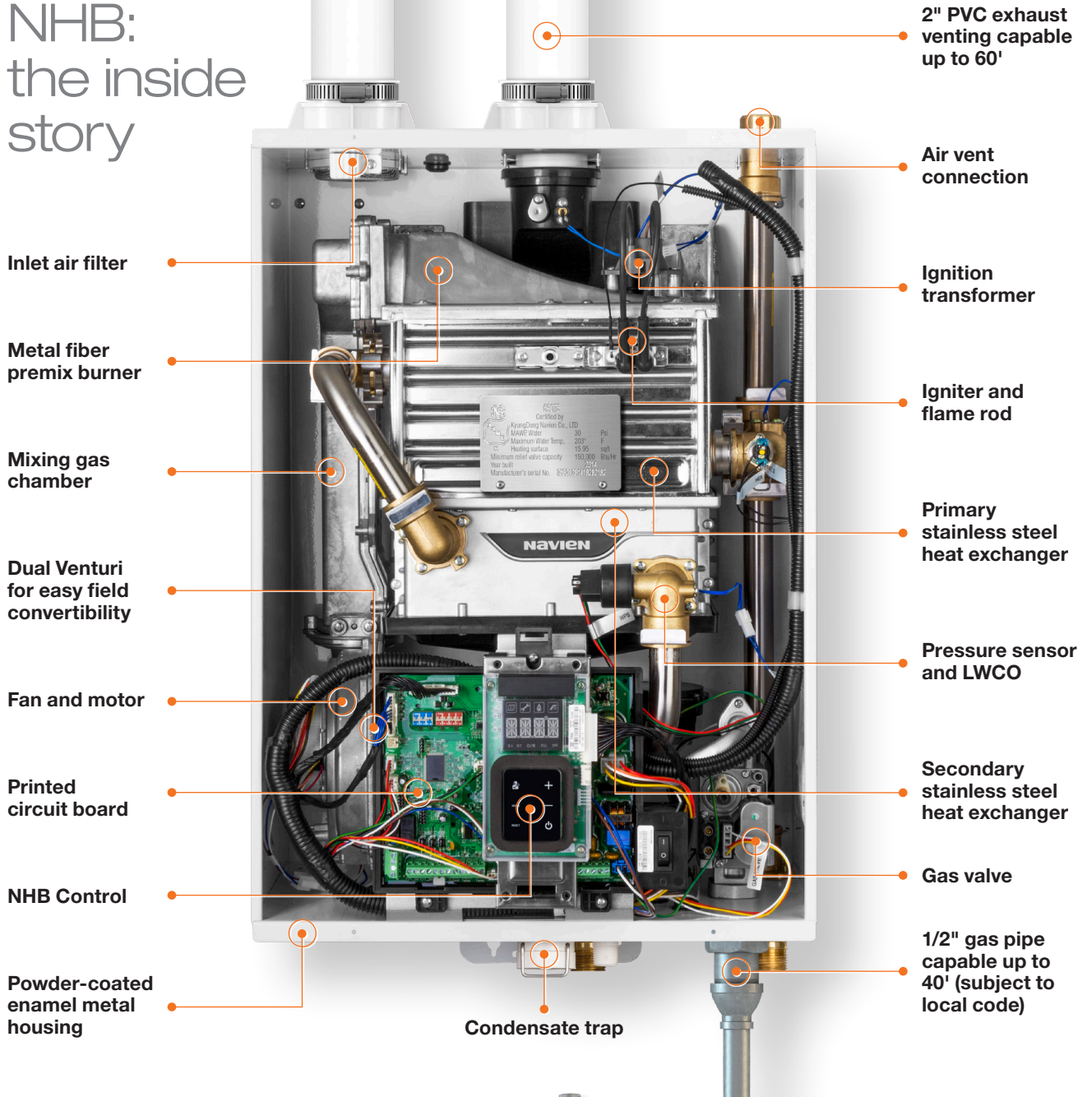
Before



After



NHB: the inside story



Inlet air filter

Metal fiber pre-mix burner

Mixing gas chamber

Dual Venturi for easy field convertibility

Fan and motor

Printed circuit board

NHB Control

Powder-coated enamel metal housing

2" PVC exhaust venting capable up to 60'

Air vent connection

Ignition transformer

Igniter and flame rod

Primary stainless steel heat exchanger

Pressure sensor and LWCO

Secondary stainless steel heat exchanger

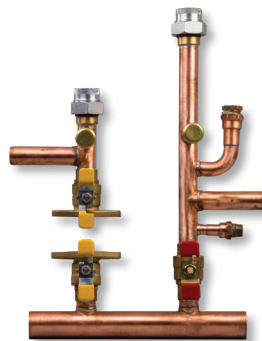
Gas valve

1/2" gas pipe capable up to 40' (subject to local code)

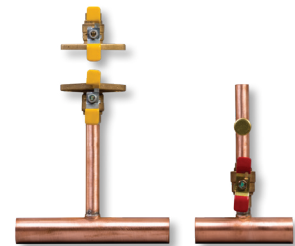
Condensate trap

Manifold kits

Navien's manifold kits are ideal for hydronic space heating applications. With these manifolds, we have done the piping work for you. Both primary and secondary loop manifold kits are designed to work on all NHB models for fast and clean installations. All you need to add is your own appropriately sized pump.



NHB Primary Manifold Kit
GFFM-MSOZUS-001



NHB Secondary Manifold Kit
GFFM-SKTZUS-001

Common venting up to 8 units and cascade capable up to 16 units

Navien's two largest condensing boilers, NHB-110 and NHB-150, can be cascaded and common vented

With our cascading technology, when a unit gets up to 75% capacity determined by the supply and return temperatures, the next unit will enable to help meet the hydronic space heating requirements. This hydronic space heating requirement and demand ratio will continue until all units are generating the

needed hydronic space heat up to the maximum cascaded capacity. The Navien cascading system also balances out the workload of each unit for longer life. The NHB is dual certified for single and 2-pipe venting applications.



Advanced filtration for hydronic heating systems

NavClean® magnetic boiler filter

NavClean is designed to work with Navien NCB-H, NFC-H, NHB and NFB-H series boilers. It is best suited for heating systems with 1" to 1-1/4" copper or black iron pipes. It features a permanent magnet mounted inside the glass reinforced nylon housing.

- Powerful permanent magnet for removing higher levels of iron oxide, sludge and debris
- 360° rotation allows flexibility of installation
- Inlet and outlet ports for rapid in-line installation
- Tool-free valve connection prevents cross threading
- Large canister and full flow valves result in minimal pressure drop and unrestricted flow
- Low profile drain valve makes installation and service easier
- High performance seals provide higher protection against leaks



In minutes,
the NavClean filter
traps the debris,
and water is clear



NHB Series boiler accessories



SmartZone+ pump controller

Zone pump controller designed to work with NHB series units allowing control from 2 to 6 zone pumps.

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



NaviLink™ Wi-Fi control

This add-on accessory will enable customers with smartphones and tablets to control temperatures remotely, access usage data and receive diagnostic notifications on all Navien products (NPE-A2, NPE-S2, NPN-U, NPN-E, NCB-H, NFC-H, NHB, and NFB-H).

PBCM-AS-001



NaviLink Lite Wi-Fi control

This add-on accessory will enable customers with smartphones and tablets to control temperatures remotely, access usage data and receive diagnostic notifications on all Navien products (NPE-A2, NPE-S2, NPN-U, NPN-E, NCB-H, NFC-H, NHB, and NFB-H).

PBCM-AS-002



Common vent collar kit

Required for cascade/common vent installations with NHB series units produced on or after September 15, 2016. Includes cascade cable.

30014367B

Includes cascade cable (GXXX000546), common vent collar damper and VID cable.



Plumb easy valve 1" (V2),

1" isolation valves without relief valve designed to work on NHB series units. Allows for easy and quick servicing of hydronic space heating systems.

GXXX002983



Ready-Link® rack (V4)

Base
GFFM-KDIZUS-009

Add-on
GFFM-KDIZUS-010



NaviClean® magnetic filter for boilers

This industry leading filtration device is designed to protect hydronic heating systems by capturing free floating iron oxides.

Note: for single boiler installations only.

GXXX001727



Commercial neutralizer

Designed to neutralize the condensate of up to 16 NHB series units.

GXXX002367

Replacement media for commercial neutralizer

GXXX002369



Light commercial neutralizer

Designed to neutralize the condensate of up to 6 NHB series units.

GXXX002366

Replacement media for light commercial neutralizer

GXXX002368



Residential neutralizer (V2), 1 unit

Residential condensate neutralizer for NHB series units designed to neutralize the condensate of one unit.

GXXX002212

Replacement media for residential neutralizer

GXXX001323



Universal temperature sensor

Designed to sense supply, return or tank temperature of hydronic heating system.

Works with all NHB series boilers.

GXXX001769

