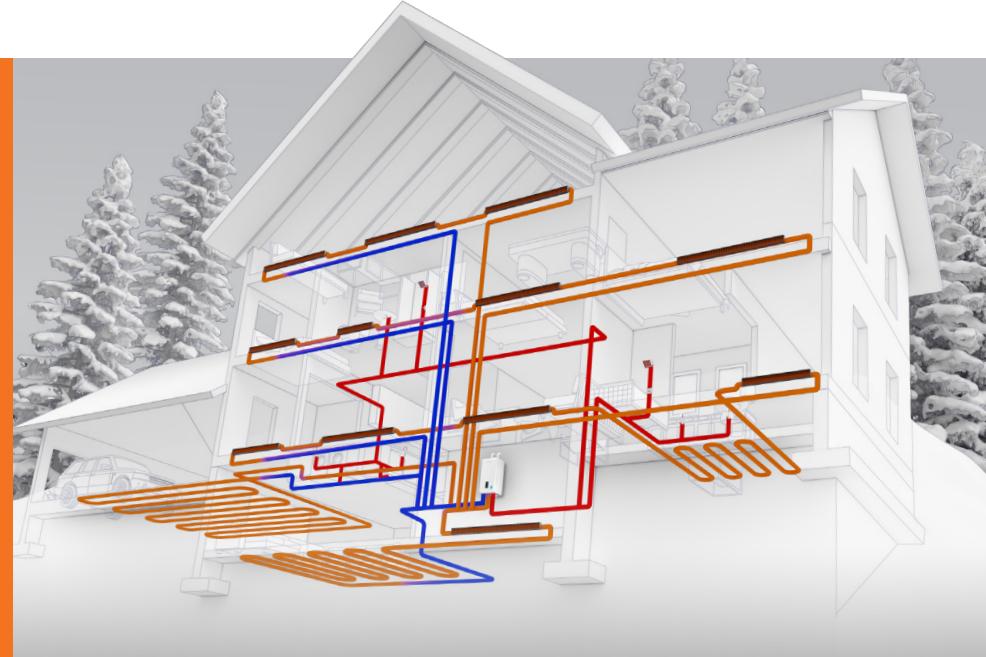


## NFC-H Condensing High Capacity Fire Tube Combi-boilers



The highest selling combi-boiler brand goes even higher with whole house heating and DHW

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



# NFC-H NAVIEN FIRE TUBE CONDENSING HIGH CAPACITY COMBI-BOILERS

Highest heating and DHW performance ever built into one compact combi-boiler

Navien innovation, durability and proven fire tube technology has done it again. The new NFC-H has more heating and DHW capacities for today's larger progressive homes. Navien continues to reinvent smarter ways to bring high efficiency home comfort to your customers. Also, Navien continues to make installation and set-up easier for contractors.



PATENTED  
STAINLESS STEEL  
HX FOR HEATING

SEPARATE  
HIGHER FLOW  
DHW HX

ADVANCED  
USER INTERFACE

TDR UP TO  
15:1 HTG  
DHW

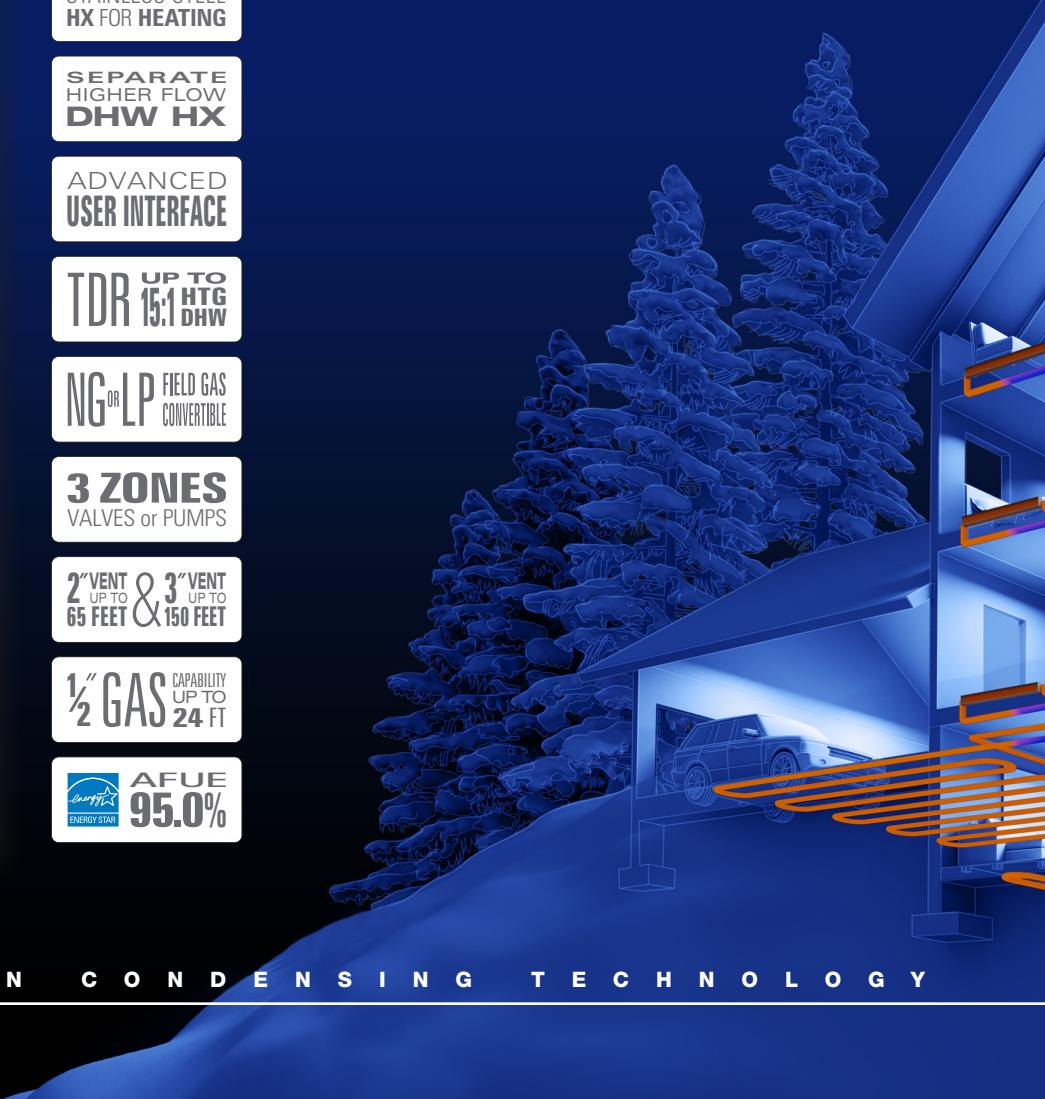
NG OR LP FIELD GAS  
CONVERTIBLE

3 ZONES  
VALVES OR PUMPS

2" VENT UP TO 65 FEET & 3" VENT UP TO 150 FEET

1/2" GAS CAPABILITY UP TO 24 FT

AFUE  
ENERGY STAR  
95.0%



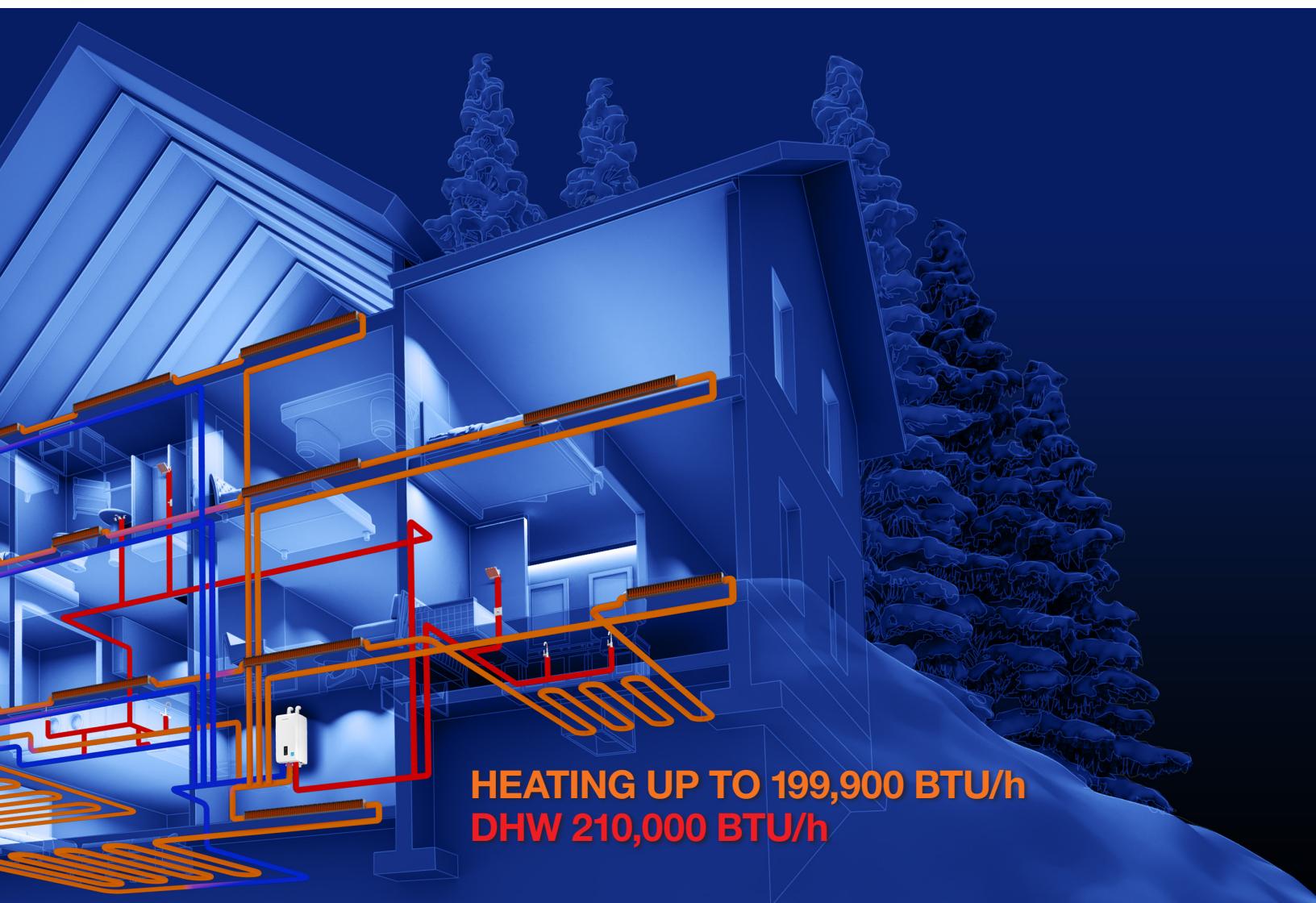
THE LEADER IN CONDENSING TECHNOLOGY



## Navien takes high efficiency fire tube combi technology to new heights

- **Highest** DHW maximum BTU/H in residential combi-boilers... 210,000 per hour
- **Highest** DHW flow rate @ 70°F rise... up to 5.4 GPM
- **Highest** residential combi DHW 15:1 TDR
- **Highest** residential combi heating TDR... up to 15:1\*
- **High altitude certification...** up to 10,100 feet (NG or LP)
- Built-in zone controls for up to three zone valves or zone pumps
- Cascade capable with up to 15 NPE tankless water heaters for expanded DHW flow

\*Based on NFC-250/200H.

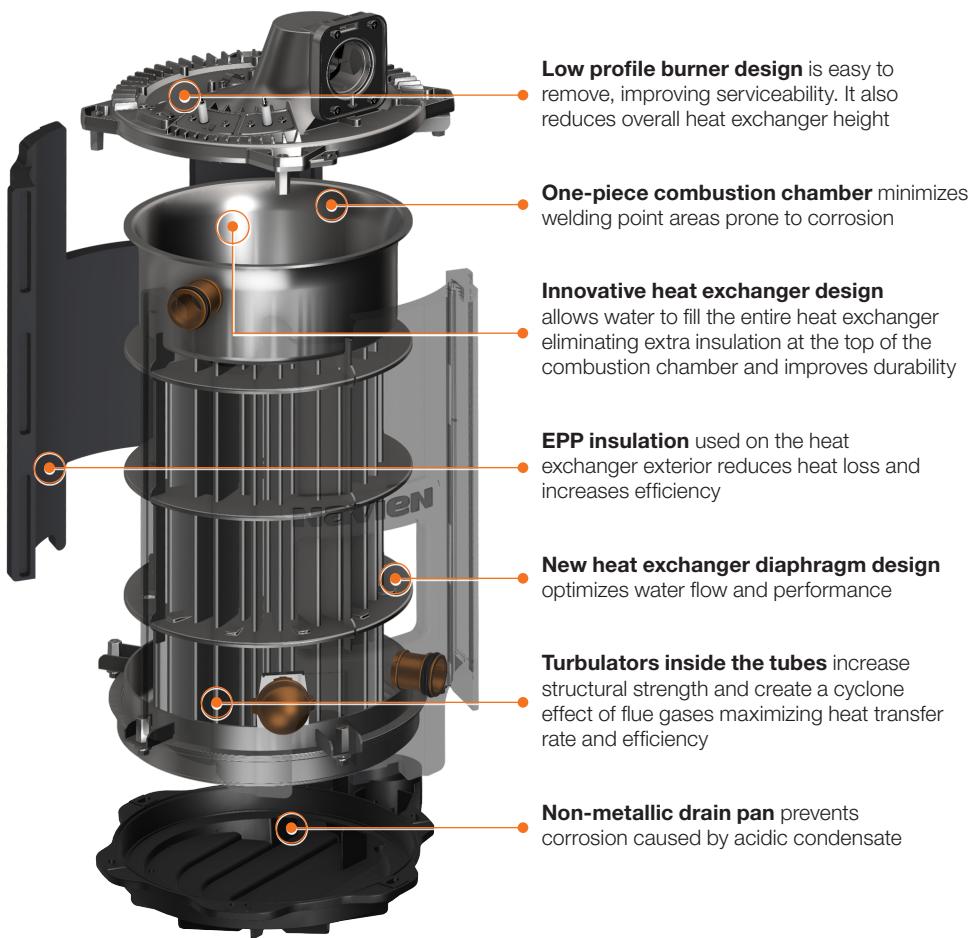


 **NAVIE**n

# COMPARE THESE ADVANTAGES AND SEE WHY NFC-H COMBI'S ARE THE RIGHT FIT FOR SMALL AND LARGE HOMES

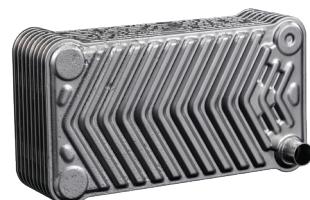
## Patented stainless steel fire tube heat exchanger

Navien's advanced patented stainless steel heat exchanger design is ASME-Certified, "H" Stamped, and reduces high stress point weld failures common on other combi-boilers. This compact, in-house designed and manufactured heat exchanger uses the latest automated laser welding technology to deliver superior product quality.

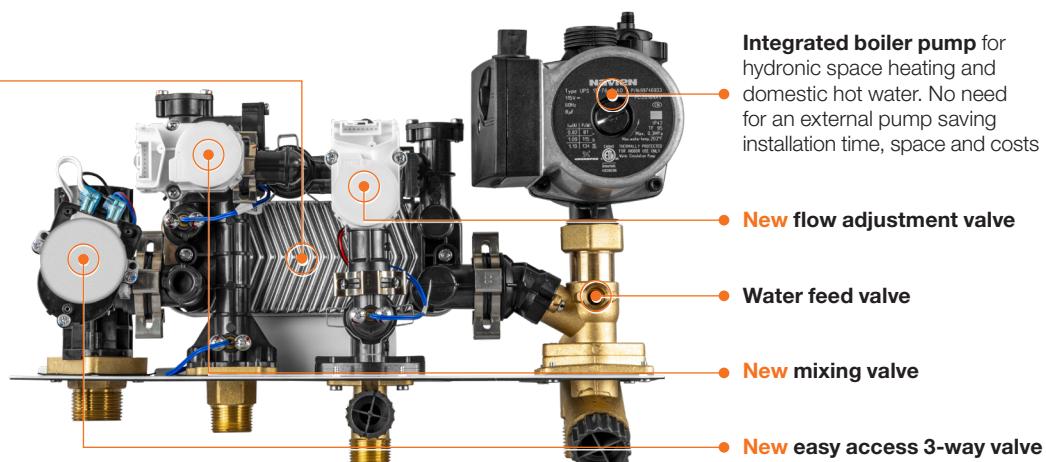


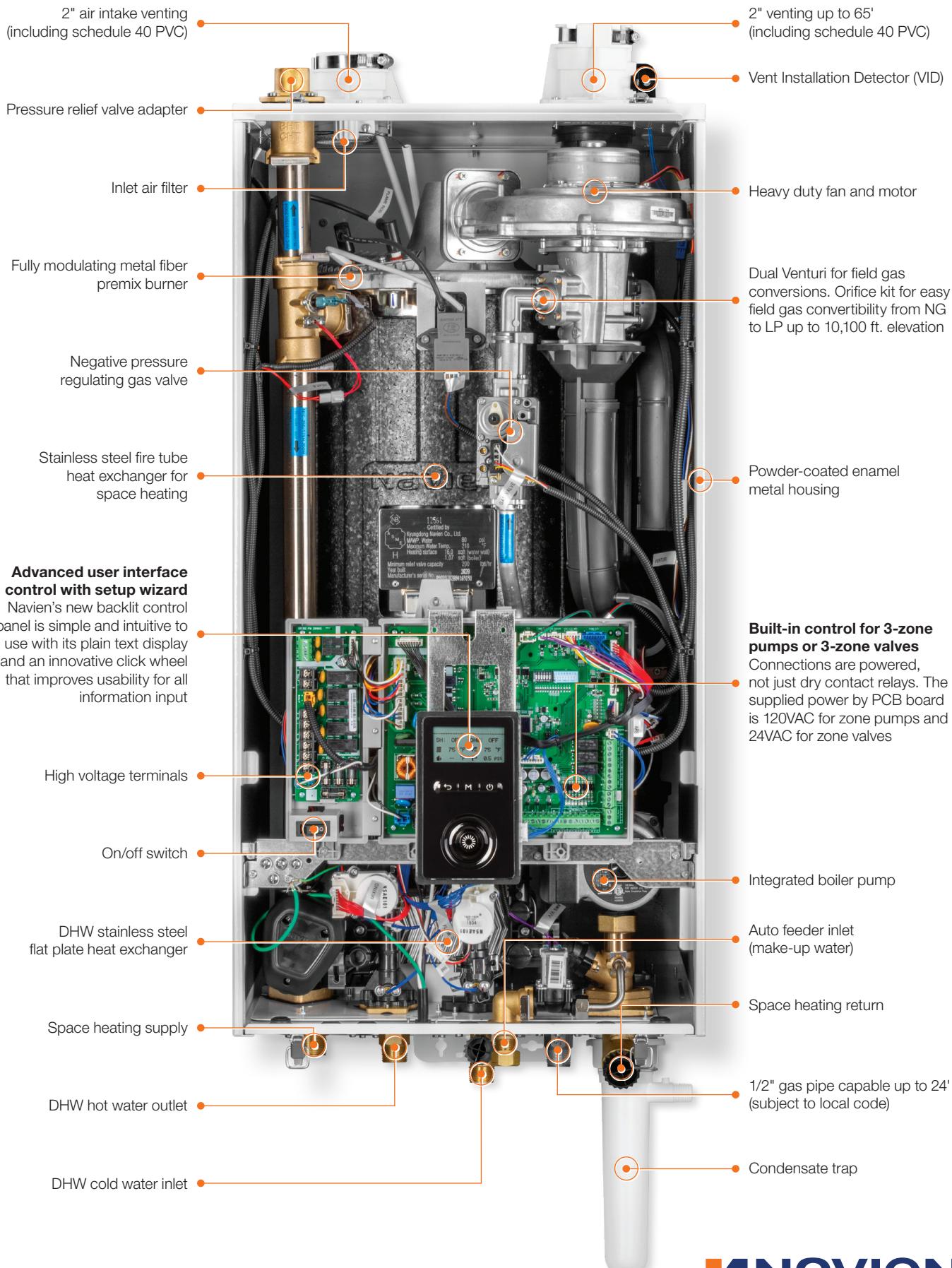
## Built-in DHW module now with advanced performance

Navien's new innovative domestic hot water heat exchanger now generates even more hot water, giving customers the ability to run up to 3 showers and a dishwasher, all at the same time with up to 5.4 gallons per minute at a 70°F temperature rise.



**Separate stainless steel flat plate heat exchanger** for DHW creates one of the highest flow rates for combi-boilers in the industry. Up to 5.4 GPM @ 70°F temperature rise.



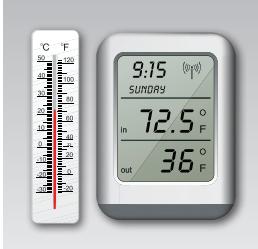


# MORE REASONS TO CHOOSE NFC-H FOR THE BEST ALL-IN-ONE HOT WATER SYSTEM



## Dual inputs of 210,000 BTU/H for DHW and up to 199,900 BTU/H for heating

Satisfies all the space heating and domestic hot water requirements of most typical large homes.



## TDR up to 15:1 for heating and for DHW

The sophisticated gas flow control system provides a high turndown ratio, reducing energy waste and excessive boiler cycling and enhances temperature control for DHW.



## Space saving and light weight design

Navien's sleek wall-hung combi-boilers occupy 80% less space than traditional floor standing boilers and tank water heaters.



## 2" PVC venting and 1/2" gas pipe capability

Save time and effort in retrofit application with 2" PVC venting up to 65' or up to 150' with 3" venting. 1/2" gas lines for up to 24' also speeds up installations.

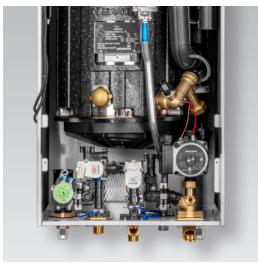
### Safety vent sensor

Vent Installation Detector (VID).



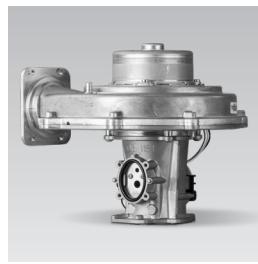
## Expanded DHW capability

For increased domestic hot water flow demand, the NFC-H can be cascaded with up to 15 NPE-2 tankless water heaters.



## Easy access to DHW module and valves

All components of DHW module including water feed valve, flow adjustment valve, mixing valve and cartridge-style 3-way valve are right behind circuit board for easy serviceability.



## Dual Venturi and field gas convertibility

Dual Venturi system creates better combustion control and turndown ratio. Field gas convertibility is easy with orifice conversion kits for NG high altitude (5,400–10,100 ft.) and LP (up to 10,100 ft.) included with NFC-H Series combi-boilers.



# NFC-H combi-boiler accessories



## 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 NFC-H models.

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.

PBCM-AS-002



## HotButton®

### DHW activation

At the push of a button, the HotButton® hot water system activates the DHW heat exchanger to heat water in the supply lines to provide hot water only when it's needed.

PZZZ-00046



## NaviClean™

### Magnetic filtration system

Removes higher levels of iron oxides, sludge and debris with powerful magnetic filter.

GXXX001727



## PeakFlow® S

### Scale prevention system

GPWC110001AC001

PeakFlow® S replacement filter  
GWFC110GD001



## SmartZone™

### Pump controller

Allows control from 4 to 6 zone pumps and expansion of built-in NFC-H zoning.

2 Zones: PFMZ-02P-001

3 Zones: PFMZ-03P-001

4 Zones: PFMZ-04P-001

6 Zones: PFMZ-06P-001



## NaviCirc™

### Recirculation valve

NaviCirc™

PFFW-SXX-001

NaviCirc™ kit

30022965A



## Combi-boiler primary manifold kit

This package includes new stainless steel manifold, system-matched isolation valves and PRV-air vent adapter.

30026576B



## Common vent collar kit

Required for common venting the NFC-H with NPE tankless water heaters.

30014367B

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



## Commercial neutralizer

Commercial condensate neutralizer for up to 16 units (1 NFC-H and up to 15 NPE's).

GXXX001325

## Commercial replacement media

GXXX001329



## Light commercial neutralizer

Light commercial condensate neutralizer for up to 6 units (1 NFC-H and up to 5 NPE's).

GXXX001324

## Lt. commercial replacement media

GXXX001328



## Residential neutralizer (V2)

Residential condensate neutralizer for NFC-H series units designed to neutralize the condensate of one unit.

GXXX002212

## Residential replacement media

GXXX001323



## Cascade cable

Up to 15 NPE-A/S tankless water heaters.

GXXX000546



## Universal temperature sensor

Designed to sense supply, return or tank water temperature. Works with all NFC-H series combi-boilers.

GXXX001769



## Ready-Link® rack base (V3) and add-on rack(s)

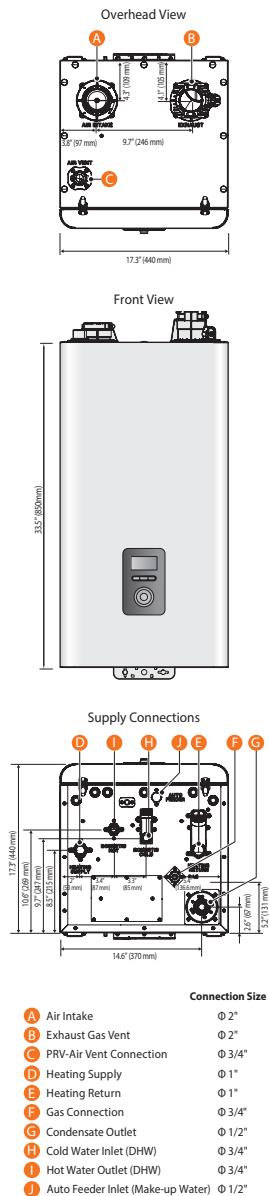
### Base (V3)

GFFMKDIZUS-005

### Add-on (V3)

GFFMKDIZUS-006

## Dimensions



## Ratings & specifications

Navien Combination Condensing Boiler Space Heating Ratings <small>AHRI CERTIFIED®</small>					Other Space Heating Specifications			
Model Number <sup>1</sup>	Heating Input (BTU/H)		Heating Capacity <sup>2</sup> (BTU/H)	Net AHR Rating Water <sup>3</sup> (BTU/H)	AFUE <sup>2</sup> %	Water Pressure	Water Connection Size (Supply, Return)	Water Volume
	Min	Max						
NFC-250/175H	13,300	175,000	161,000	140,000	95.0	12-80 psi	1" NPT	4.5 gallons
NFC-250/200H	13,300	199,900	183,000	159,000	95.0			

<sup>1</sup> Ratings are the same for natural gas models converted to propane use.

<sup>2</sup> Based on U.S. Department of Energy (DOE) test procedures.

<sup>3</sup> 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.

Navien Combination Condensing Boiler Domestic Hot Water Ratings			Other Domestic Hot Water Specifications			
Model Number	Input Ratings (BTU/H)		Water Pressure PSI	Minimum Flow Rate GPM (L/m)	Flow Rate 45°F (25°C) Temp Rise GPM (L/m)	DHW Supply Connection Size
	Min	Max				
NFC-250/175H	13,300	210,000	15-150	0.5 (1.9)	7.9 (30.0)	3/4" NPT
NFC-250/200H						3/4" NPT

Item	Model	
	NFC-250/175H	NFC-250/200H
Dimensions	17.3" W x 17.3" D x 33.5" H	
Boiler weight	141 lb (64 kg)	
Boiler weight with water	170 lb (77 kg)	
Installation type	Indoor wall-hung	
Venting type	Forced draft direct vent	
Ignition	Electronic ignition	
Natural gas supply pressure (from source)	3.5" to 10.5" WC	
Propane gas supply pressure (from source)	8.0" to 13.5" WC	
Natural gas manifold pressure	-0.03" to -0.92" WC	
Propane gas manifold pressure	-0.02" to -0.77" WC	
Gas connection size	3/4" NPT	
Power supply	Main supply 120V AC, 60Hz	
	Maximum power consumption Less than 15 amperes	
Materials	Casing Cold-rolled carbon steel	
	Heat exchanger Stainless steel	
Venting	Exhaust 2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class III, A/B/C) 2" or 3" stainless steel	
	Intake 2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class III, A/B/C) 2" or 3" stainless steel	
	Vent clearance 0" to combustibles	
Safety devices	Flame rod, APS, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor, water pressure sensor, burner high limit fuse, vent installation detector (VID)	

NFC-250/175H and NFC-250/200H Series	
Temp. Rise °F (°C)	Flow Rate GPM (L/m) <sup>1</sup>
35 (19)	10.8 (40.9)
40 (22)	9.5 (35.8)
45 (25)	8.4 (31.8)
50 (28)	7.6 (28.6)
55 (31)	6.9 (26.0)
60 (33)	6.3 (23.8)
67 (37)	5.6 (21.4)
70 (39)	5.4 (20.4)
77 (43)	4.9 (18.6)
80 (44)	4.7 (17.9)
85 (47)	4.4 (16.8)
90 (50)	4.2 (15.9)
100 (56)	3.8 (14.3)

<sup>1</sup> Max GPM based on installation conditions.

Navien reserves the right to change specifications at any time without prior notice.  
Please refer to [www.Navieninc.com](http://www.Navieninc.com) to verify you have the most current information.

## Heating input ranges

Model	Heating (BTU/H)	DHW (BTU/H)
NFC-250/175H	13,300-175,000	13,300-210,000
NFC-250/200H	13,300-199,900	13,300-210,000

## Temperature setting ranges

Item	Temperature Setting Range °F (°C)	Remarks
Space heating	77-185 (25-85)	Actual supply and return temperatures vary depending on the selected outdoor reset curve.
Return	68-158 (20-70)	
DHW	86-140 (30-60)	

## Warranty

Type	Residential*	Commercial
Heat exchanger	10 years	5 years
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](http://Navieninc.com).



Navien Inc., 20 Goodyear, Irvine, CA 92618 800-519-8794 [navieninc.com](http://navieninc.com)

Navien Canada, Inc. 555 Hanlan Rd., Unit 7 Vaughan, ON L4L 4R8 800-519-8794 [navieninc.ca](http://navieninc.ca)



T H E L E A D E R I N C O N D E N S I N G T E C H N O L O G Y