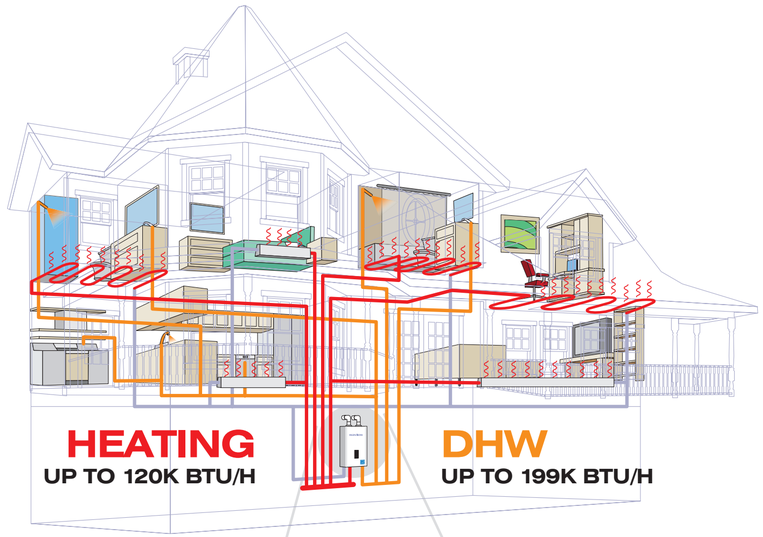
The first high efficiency tankless condensing combi-boiler that can do it all



NCB warranty

Residential Single Family Use Only	
Labor	1 year
Parts*	5 year
Heat exchanger	10 year

*Includes DHW flat plate HX

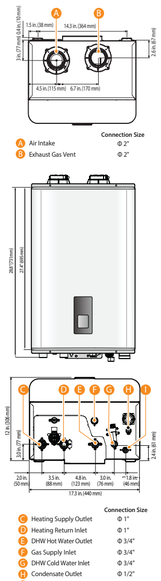
Most Efficient 2015
ENERGY STAR www.energystar.gov

NCB applications

- Air handler
- Hydronic heating
  - Hydronic fan coils
  - Baseboard radiators
  - Radiant floors

For NCB technical drawings of specific installations and requirements, please visit Navien.com

Dimensions



Ratings & specifications

Navien Combination Boiler Space Heating Ratings					
Model Number[1]	Heating Input, MBH		Heating Capacity[2], MBH	Net AHRI Rating, Water[3], MBH	AFUE[2], %
	Min	Max			
NCB-180	14	80	75	65	95.0
NCB-210	18	100	94	82	95.0
NCB-240	18	120	112	97	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		NCB-180	NCB-210	NCB-240
Gas input	Space heating	14,000–80,000 BTU/H	18,000–100,000 BTU/H	18,000–120,000 BTU/H
	Domestic hot water	14,000–150,000 BTU/H	18,000–180,000 BTU/H	18,000–199,900 BTU/H
Flow rate (DHW)	77°F (43°C) Temp Rise	3.4 GPM (12.9 L/m)	4.0 GPM (15.1 L/m)	4.5 GPM (17.0 L/m)
Dimensions		17"(W) x 28"(H) x 12"(D)	17"(W) x 28"(H) x 12"(D)	17"(W) x 28"(H) x 12"(D)
Weight		74 lbs (34kg)	84 lbs (38kg)	84 lbs (38kg)
Installation type		Indoor wall-hung		
Venting type		Forced draft direct vent		
Ignition		Electronic ignition		
Water pressure (Hydronic/DHW)		12–30 PSI / 15–150 PSI		
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 (min/max)		-0.07" WC / -0.66" WC	-0.05" WC / -0.36" WC	-0.06" WC / -1.20" WC
Propane gas manifold pressure (min/max)		-0.07" WC / -0.66" WC	-0.10" WC / -0.66" WC	-0.03" WC / -0.98" WC
Minimum flow rate (DHW)		0.5 GPM (1.9 L/m)		
Connection sizes	Heating supply/return	1" NPT		
	DHW inlet/outlet	3/4" NPT		
	Gas inlet	3/4" NPT		
	Auto feeder	1/2" NPT		
	Condensate outlet	1/2" NPT		
Power supply	Main supply	120V AC, 60Hz		
	Maximum power consumption	200W (up to 2 amperes)		
Materials	Casing	Cold rolled carbon steel		
	Heat exchangers	Primary/secondary heat exchanger: stainless steel DHW heat exchanger: stainless steel		
Venting	Exhaust	2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)		
	Intake	2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class II, 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 www.navien.com to verify you have the most current information.

Accessories

NCB Primary Manifold Kit (GFFM-MCOZUS-001)	Secondary Manifold Kit (GFFM-SKTZUS-001)	Plumb Easy Valve Set 1" Standard (300109S0A) 3/4" Standard (30009323A)	Residential Neutralizer (1 unit) (GXXX001322) Media Refill (GXXX001323)	Light Commercial Neutralizer (up to 6 units) (GXXX001324) Media Refill (GXXX001328)	PeakFlow Anti-Scale System (GXXX001326) Media Refill (GXXX001327)	Cascade Cable (GXXX000546)	Zone Pump Controller 2 Zones: (PFMZ-02P-001) 3 Zones: (PFMZ-03P-001) 4 Zones: (PFMZ-04P-001) 6 Zones: (PFMZ-06P-001)	Outdoor Sensor and wire (30012950A)

To learn more contact your Navien representative, wholesaler, or visit www.BoilersMadeSmart.com, or www.Navien.com

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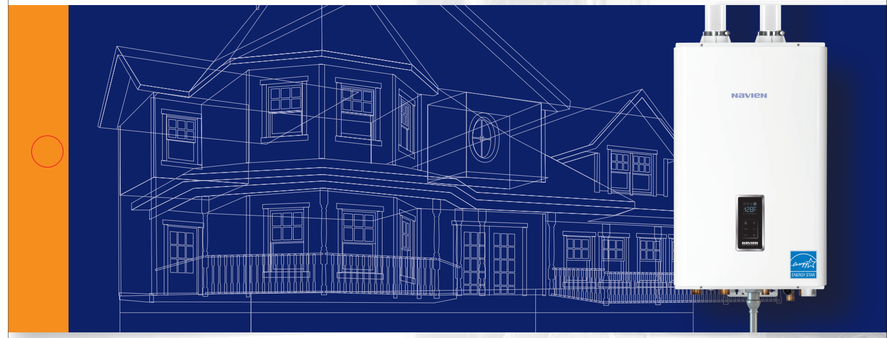
KD Navien®

Navien NCB Combi-boiler



Finally, a combi-boiler strong enough to support heating and DHW for the whole house

Introducing Navien NCB Combi-boiler

Navien NCB is the first high efficiency tankless condensing combination boiler with the capacity to supply both heat and domestic hot water for larger homes — enough hydronic heat for a whole house, plus hot water to run two showers and a dishwasher all at the same time.

The Navien NCB saves installation time and reduces call backs. In addition, the NCB takes up 80% less space than a traditional floor standing boiler and tank water heater. Your customer now has more room, saves energy and enjoys all the hot water they need, whenever they want it.

KD Navien®
The Leader in Condensing Technology

Compare these advantages to any tankless condensing combi system

Dual inputs of up to 120k BTU/h for heating and 199k BTU/h for DHW

Supplies all the heat and domestic hot water that most houses require.

4.5 GPM@77° temperature rise for domestic hot water

Separate stainless steel flat plate heat exchanger for DHW creates the highest flow rate for any combi-boiler in the industry.

Turn down ratio of 6:1 for heating and 11:1 for DHW

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

Dual stainless steel heat exchangers

Resist corrosion better than copper to provide longer life.

Field gas convertibility

Dual venturi system allows for easy field convertibility from NG to LP operation. Orifice for LP conversion included.

PVC venting

Low exhaust gas temperatures allows use of PVC, CPVC, ULC S636 and polypropylene vent systems, reducing installation time and costs. System can use 2" venting for up to 60', or up to 150' with 3" venting.

Low gas pressure operation

Our negative pressure gas valve ensures maximum performance all the way down to a minimum gas pressure of 3.5" of water column.

Uses existing ½" gas piping

Save time and effort in retrofit applications with ½" gas lines for up to 24'.

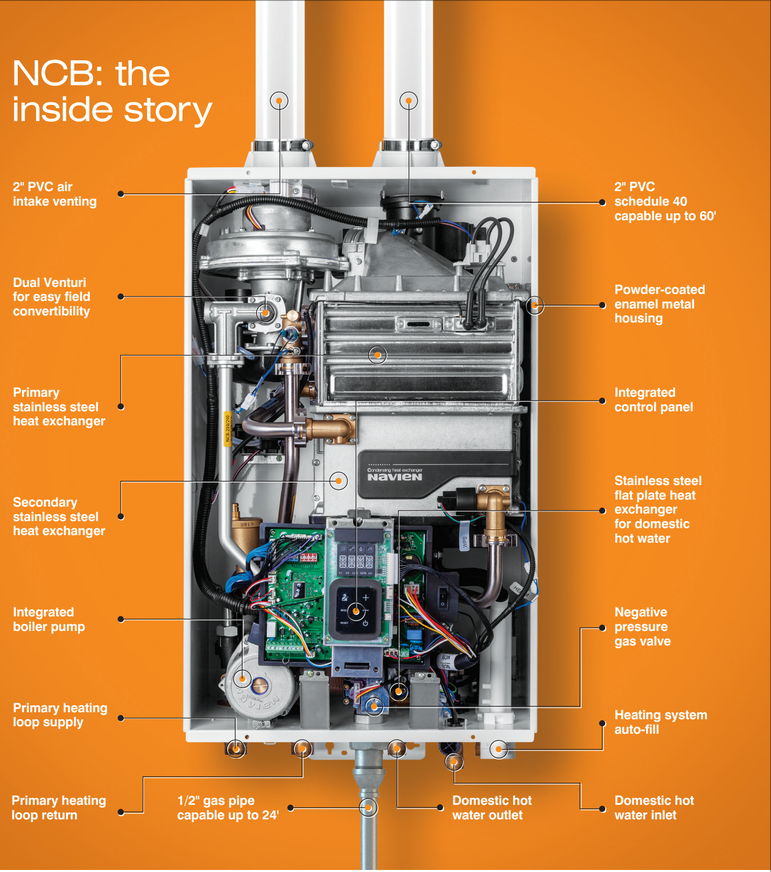
Space saving design

Occupies 80% less space than a traditional floor standing boiler and tank water heater.

Linkability

For extraordinarily large domestic hot water flow demand, the NCB can be cascaded with our NPE units.

NCB: the inside story



NCB Primary Manifold Kit

For fast installation and maximum efficiency, install our system matched manifold kit.