Commercial and Residential Ultra Low NOx Product Selection Guide





Ultra Low NOx Performance Plus The Proven Defender Safety System®

Ultra Low NOx Performance

The Eco-Defender Series sets the standard for low emission water heaters. With a state-of-the-art radiant burner and an advanced control system, Eco-Defender models emit 75% less NOx emissions

combustion efficiencies and consistent operational temperatures. The result is an ecologically friendly and highly efficient line of water heaters from Bradford White.

than standard models while maintaining optimal

Eco-Defender Safety System® with ScreenLok® Technology

The Eco-Defender Safety System® is an exclusive
Flammable Vapor Ignition Resistant (FVIR) technology introduced by
Bradford White to meet the American National Standards Institute's
(ANSI) standard for residential gas water heaters. Its patented
Screenlok® Technology Flame Arrestor design resists the ignition of
flammable vapors that can occur outside the water heater. Since its
inception, the Eco-Defender Safety System® has proven to be one of
the most successful, reliable, and maintenance-free FVIR technologies
in the industry.



RESIDENTIAL ULTRA LOW NOX WATER HEATERS



Ultra Low NOx Atmospheric Vent Models

Our Eco-Defender Ultra Low NOx models emit 75% less NOx emissions than standard models while maintaining optimal combustion efficiencies and consistent operational temperatures. They meet the most stringent air quality requirements in the country

- · Up to 0.64 Energy Factor
- · Natural Gas only
- 30, 40, 48, & 50 gallon capacities
- Up to 50,000 BTU/Hr.
- 16", 18", 20", 22", and 24" diameters available



Ultra Low NOx Atmospheric Vent High Input Models

Ultra Low NOx High Input water heaters are atmospherically vented. With capacities of 48, 75, and 100 gallons and inputs from 55,000 to 85,000 BTU/Hr., these models are perfect for many larger water heating applications.

- 0.60 Energy Factor
- Natural Gas only
- 48, 75, & 100 gallon capacities
- Up to 85,000 BTU/Hr.



Ultra Low NOx Atmospheric **Vent Damper Models**

These Ultra Low NOx water heaters feature an automatic flue damper that helps to reduce standby heat loss. The flue damper, additional insulation, and heat traps help these units save energy and money.

- Up to 0.65 Energy Factor
- Natural Gas only
- 30, 40, & 50 gallon capacities
- Up to 40,000 BTU/Hr.



Ultra Low NOx Power Vent Models

These Eco-Defender Safety System® Ultra Low NOx water heaters are power vented for positive exhaust. They offer greater installation flexibility with the ability to vent through a wall or roof, with either 2", 3", or 4" (depending on the model) PVC", ABS, or CPVC pipe.

- ENERGY STAR® qualified (URG2PV40T, 50T & 50H)
- Up to 0.70 Energy Factor
- · Natural Gas only
- 40, 48, 50, & 75 gallon capacities
- Up to 76,000 BTU/Hr.



Ultra Low NOx Power Direct Vent Models

Ultra Low NOx Power Direct Vent models use outside air for combustion and are the solution to installations that lack sufficient inside air. All models can utilize an optional concentric vent kit.

- ENERGY STAR® qualified
- Up to 0.70 Energy Factor
- Natural Gas only
- 40, 48, & 50 gallon capacities
- Up to 50,000 BTU/Hr.



Ultra Low NOx Direct Vent Models

Ultra Low NOx Direct Vent water heaters utilize a coaxial (pipe inside a pipe) vent pipe that takes air in from the outside (outer pipe) and sends combustion gases directly back to the outside (inner pipe). It is the perfect choice for situations with insufficient combustion air. No electricity required.

- Up to 0.62 Energy Factor
- Natural Gas only
- Solid and flexible vent kits available
- 40, 48, & 50 gallon capacities
- Up to 45,000 BTU/Hr.



Infiniti High Efficiency Tankless Gas Model

The High Efficiency Bradford White Infiniti Tankless™ Water Heater with SRT™ (Scale Reduction Technology) offers a fully condensing design, an input of 199,000 BTU/Hr., a fully modulating burner, and exceptional temperature stability. The RTG-199HE achieves a 0.95 Energy Factor.

- ENERGY STAR® qualified 0.95 **Energy Factor**
- · Built-In digital control
- · Flexible venting
- Gas connection 1/2", 3/4" or 1"
- Built-In freeze protection
- Indoor/outdoor installation
- Optional cascading kit up to 24 units
- · Natural Gas or Propane



Infiniti Mid Efficiency Tankless Gas Model

The Mid Efficiency Bradford White Infiniti Tankless™ Water Heater with SRT™ (Scale Reduction Technology) is a non-condensing model with an input of 199,000 BTU/Hr., a single modulating burner for an even flame, and an all-copper heat exchanger and waterways.

- Built-In digital control
- Gas connection 1/2". 3/4" or 1"
- Built-In freeze protection
- Indoor/outdoor installation
- Optional cascading kit up to 24 units
- Natural Gas or Propane











COMMERCIAL ULTRA LOW NOX WATER HEATERS



Commander Series™ Ultra Low NOx Atmospheric Vent

The Commander Series™ is a line of high efficiency, ultra low NOx, commercial gas water heaters featuring a unique down-fired pre-mix power burner that automatically regulates for optimum combustion and efficiency. Together with a two pass, multiple tube system, the Commander Series achieves excellent thermal efficiencies and meets the most stringent air quality standards for allowable NOx emmisions.

- Features ICON HD™ Commercial Control System
- Non-condensing 82% thermal efficiency
- · Natural Gas or Propane
- 98 & 100 gallon capacities
- Up to 399,999 BTU/Hr.



ASME & Non-ASME Ultra High Efficiency eF Series®

The eF Series® utilizes exclusive designs and technologies for unsurpassed efficiency, installation flexibility, and quiet operation. These units are the most efficient of their kind in the industry and now, several models qualify for ENERGY STAR®. It's extremely quiet, a feature building owners, managers, and occupants will appreciate.

- Features ICON HD™ Commercial Control System
- Unprecedented high efficiency
- Natural Gas or Propane
- 60 & 100 gallon capacities
- Up to 399,999 BTU/Hr.



LIGHT DUTY ULTRA LOW NOX WATER HEATERS



Light Duty Ultra Low NOx TTW Power Vent

The Power Vent (TTW®) (Through-the-Wall) units are perfect for applications where installation flexibility is as important as meeting hot water demands. Power vented for positive exhaust, these units can be vented horizontally and vertically up to 180 feet. These extremely long vent lengths solve difficult ventilation challenges.

- Up to 0.70 Energy Factor
- Natural Gas only
- 48 & 75 gallon capacities
- Up to 76,000 BTU/Hr.



Light Duty Ultra Low NOx Direct Vent

These models utilize a closed combustion and co-axial concentric direct venting system, making them perfect for installations that lack sufficient air for combustion. They require no electrical power yet still offer sidewall venting. Venting options include a solid telescoping extension that can accommodate up to eight feet vertically and eight feet horizontally.

- · Up to 0.60 Energy Factor
- Natural Gas only
- · 48 gallon capacity
- 45,000 BTU/Hr.



Light Duty Ultra Low NOx Power Direct Vent

Power Vent units are perfect for applications where installation flexibility is as important as meeting hot water demands. Power vented for positive exhaust, these units can be vented horizontally and vertically up to 180 feet. These extremely long vent lengths solve difficult ventilation challenges.

- Up to 0.68 Energy Factor
- Natural Gas only
- 48 gallon capacity
- Up to 50,000 BTU/Hr.



Light Duty Ultra Low NOx Atmospheric Vent High Input

These models are atmospherically vented and offer larger gallon capacities and higher recovery rates. They offer an increased amount of hot water available at a usable temperature in less time than normal input models. Perfect for applications that demand larger volumes of water such as small apartment buildings or small motels.

- · Up to 0.60 Energy Factor
- Natural Gas only
- 48, 75, & 100 gallon capacities
- Up to 85,000 BTU/Hr.

PERFORMANCE DATA AND SPECIFICATIONS

Model Number	Input BTU/Hr.	First Hour Delivery Gallons	Capacity Gallons	Diameter in.	Floor to Flue in.
Residential Ultra Low NOx	Models				
URG230T6N	32,000	58	30	18	59 ⁷ /8
URG240T6N	40,000	76	40	20	601/4
URG240S6N	40,000	74	40	22	51 ^{5/} 8
URG250T6N	40,000	90	50	22	603/16
URG250L6N	40,000	88	48	24	51 ^{5/} 8
URG250S6N	50,000	93	50	22	59 ¹ / ₂
URG250H6N	55,000	100	48	22	60 5/16
URG275H6N	76,000	N/A	75	26	641/8
URG2100H6N	85,000	N/A	100	281/4	707/16
URG1D30T6N	32,000	58	30	16	63
URG1D40S6N	40,000	74	40	20	54 13/16
URG1D40T6N	40,000	76	40	18	63 9/16
URG1D50T6N	40,000	89	50	20	633/8
URG1PV40S6N	40,000	72	40	20	57 ¹ / ₄
URG1PV50S6N	40,000	86	50	22	58 ^{1/} 4
URG2PV40T6N	40,000	72	40	20	667/8
URG2PV50T6N	40,000	86	50	22	667/8
URG2PV50H6N	56,000	99	48	22	663/8
URG2PV75H6N	76,000	N/A	75	26	69 ¹ / ₄
URG2PDV40S6N	40,000	72	40	22	59 ¹ / ₂
URG2PDV50S6N	40,000	86	50	24	601/2
URG2PDV50H6N	50,000	92	48	22	69 ¹ / ₄
URG2DV40S6N	38,000	73	40	22	633/8
URG2DV50S6N	38,000	84	50	22	65 ¹ / ₂
URG2DV50H6N	45,000	88	48	22	741/4
Model Number	Input BTU/hr	Flow @ 75°F Rise	Height in.	Width in.	Depth in.
Residential Ultra Low NO	Models				
RTG-199HE	19,900 – 199,900	8.3 gpm	30 ^{9/} 16	1713/16	10 ^{7/} 16
RTG-199ME	19,900 - 199,900	7.3 gpm	30 ^{9/} 16	1713/16	10 ^{7/} 16
Model Number	Input BTU/Hr.	First Hour Delivery Gallons	Capacity Gallons	Diameter in.	Floor to Flue in
Commercial Ultra Low NO	x Models				
UCG-100H-199-3N	199,999	N/A	100	281/4	731/4
UCG-100H-270-3N	270,000	N/A	100	281/4	731/4
UCG-100H-399-3N	399,999	N/A	98	281/4	771/4
EF-60T-125E-3N(A)	125,000	N/A	60	281/4	57
EF-60T-150E-3N(A)	150,000	N/A	60	281/4	57
		IN/A			-
EF-60T-199E-3N(A)	199,999	N/A	60	281/4	57
				28 ^{1/} ₄	57 77 ^{5/} 8
EF-100T-150E-3N(A)	199,999	N/A	60		
EF-100T-150E-3N(A) EF-100T-199E-3N(A)	199,999 150,000	N/A N/A	60 100	281/4	77 5/8
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A)	199,999 150,000 199,999	N/A N/A N/A	60 100 100	28 ^{1/} ₄ 28 ^{1/} ₄	77 ⁵ / ₈ 77 ⁵ / ₈
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A)	199,999 150,000 199,999 250,000	N/A N/A N/A N/A	60 100 100 100	28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄	77 ^{5/} 8 77 ^{5/} 8 77 ^{5/} 8
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A) EF-100T-399E-3N(A)	199,999 150,000 199,999 250,000 300,000 399,999	N/A N/A N/A N/A N/A	60 100 100 100 100	28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄	77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A) EF-100T-399E-3N(A) Light Duty Commercial Ult	199,999 150,000 199,999 250,000 300,000 399,999	N/A N/A N/A N/A N/A	60 100 100 100 100	28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄	77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A) EF-100T-399E-3N(A) EIght Duty Commercial UltuLG250H553N	199,999 150,000 199,999 250,000 300,000 399,999 tra Low NOx Models	N/A N/A N/A N/A N/A N/A	60 100 100 100 100 100	28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄ 28 ¹ / ₄	77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈ 77 ⁵ / ₈
EF-100T-199E-3N(A)	199,999 150,000 199,999 250,000 300,000 399,999 tra Low NOx Models 55,000 76,000	N/A N/A N/A N/A N/A N/A	60 100 100 100 100 100 100	28 ¹ / ₄	77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 60 ^{5/} 16
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A) EF-100T-399E-3N(A) EIght Duty Commercial Ult ULG250H553N ULG275H763N ULG2100H853N	199,999 150,000 199,999 250,000 300,000 399,999 tra Low NOx Models 55,000	N/A N/A N/A N/A N/A N/A	60 100 100 100 100 100 48 75	28 ¹ / ₄ 22 26	77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 77 ^{5/8} 60 ^{5/16} 64 ^{1/8}
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-300E-3N(A) EF-100T-399E-3N(A) EIght Duty Commercial Ult ULG250H553N ULG275H763N	199,999 150,000 199,999 250,000 300,000 399,999 tra Low NOx Models 55,000 76,000 85,000	N/A N/A N/A N/A N/A N/A	60 100 100 100 100 100 48 75 100	28 ¹ / ₄ 22 26 28 ¹ / ₄	77 ^{5/8} 60 ^{5/16} 64 ^{1/8} 70 ^{7/} 16
EF-100T-150E-3N(A) EF-100T-199E-3N(A) EF-100T-250E-3N(A) EF-100T-30E-3N(A) EF-100T-399E-3N(A) EF-100T-399E-3N(A) Light Duty Commercial Ult ULG250H553N ULG275H763N ULG2100H853N ULG2PV50H563N	199,999 150,000 199,999 250,000 300,000 399,999 ra Low NOx Models 55,000 76,000 85,000	N/A N/A N/A N/A N/A N/A 100 N/A N/A 99	60 100 100 100 100 100 48 75 100 48	28 1/4 28 1/4 28 1/4 28 1/4 28 1/4 22 26 28 1/4 22	77 5/8 77 5/8 77 5/8 77 5/8 77 5/8 77 5/8 60 5/16 64 1/8 70 7/16



Bradford White is the choice of professional installers everywhere because of the high quality, rugged durability, and unique features built into every water heater we manufacture. The ongoing development of innovative technologies gives Bradford White products, and you, the professional installer, a strong competitive advantage.

Hydrojet® Total Performance System Technology that Works!

The Hydrojet® Total Performance System thoroughly mixes incoming and stored water to reduce costly sediment buildup, minimize temperature differences (thermal stratification), and increase first hour delivery.



Vitraglas® Tested - Tough Tank Protection

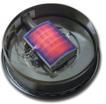
Vitraglas® is an exclusive enamel coating that provides unsurpassed protection against tank failure. Testing has proven that the unique formulation of Vitraglas® is superior to other enamel linings.



Bradford White ICON System™ Intelligent Gas Control

A revolutionary advance in water heater control technology, the ICON System[™] offers numerous energy, money, and time-saving benefits to homeowners and professional installers.





Eco-Defender Safety System® - Ultra Low NOX FVIR Compliance

Bradford White's Ultra Low NOx answer to FVIR compliance resists the ignition of flammable vapors outside the water heater using a radiant burner and ScreenLok® technology.

3" x 4" Draft Diverter allows the installer venting flexibility

User-friendly
Junction
Box for
easier wiring
connections

24/7 Expert Service and Warranty support, 24 hours a day, 7 days a week

Silent Heat Traps quietly saving energy and money We support American jobs and manufacture in Middleville, MI, USA

Built to be the Best

Committed to American Manufacturing, Wholesale Distribution, and Professional Installation.

