

Propane Heating Systems & The National Green Building Standard

Today's propane heating systems are extremely energy efficient and environmentally friendly. Propane furnaces are readily available that are over 95 percent efficient. The use of propane gas also releases fewer greenhouse gases than burning coal to generate electricity for heating or the use of heating oil.

National Green Building Standard (NGBS)

The National Association of Home Builders, in conjunction with the International Code Council, has developed an ANSI-approved, national, voluntary green home building standard. Homes receive points in 6 main areas: Lot Design and Development, Resource Efficiency, Energy Efficiency, Water Efficiency, Indoor Environmental Quality, and Building Owner Education. Depending on the points earned a home can achieve certification at the Bronze, Silver, Gold, or Emerald level.

Propane Heating Systems

Heating systems are covered in HVAC Equipment Efficiency (Section 703.4). A table summarizing this section is shown at the right, listing the points available for multiple types of heating systems. No matter which efficiency level a builder or homeowner selects, they will earn a significant number of points for installing a propane furnace or boiler. And these points accompany the main benefits of heating with propane, which include warm heating temperatures, a high level of comfort and value, and a reliable energy source.

Meanwhile, other technologies like oil-fired systems also qualify for points, but operate at lower efficiency levels which will drive up operating costs, in addition to carrying a larger carbon footprint. Heat pump systems can qualify for points, but will rely heavily on expensive back-up heat in the colder climates. And while ground-source heat pump systems may also qualify for points, these points typically come at a heavy cost premium, using dollars that could be applied to indoor air quality and other efficiency measures.

Propane heating systems are the best choice when building energy efficient homes. Not only do propane furnaces and boilers earn you points in the NGBS but they are inexpensive, readily available, easy to install, and there are experienced installers in every market.

Additional Points for Propane

Direct vented systems can also earn you an additional 5 points under Section 901.1.3. Lastly, a propane water heater (Section 703.5.1) and a propane burning direct vent fireplace (Section 901.2) can earn you additional points.

Visit www.BuildwithPropane.com to learn more about the Federal tax credits for new and existing homes, including a personal tax credit of 30%, up to \$1,500, for installing efficient propane heating systems, as well as other rebates that may be available in your state for installing propane appliances.

Propane Education & Research Council

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Points for Heating System Efficiency in the NGBS

System Type & Efficiency	Climate Zone					
	1	2	3	4	5	6-8
Propane/Gas Furnace ≥ 90% AFUE	0	2	5	8	11	14
Propane/Gas Furnace ≥ 92% AFUE	0	2	6	9	12	15
Propane/Gas Furnace ≥ 94% AFUE	0	3	7	10	14	17
Oil Furnace ≥ 83% AFUE	0	1	3	3	7	7
Oil Furnace ≥ 90% AFUE	0	2	5	8	11	14
Propane/Gas Boiler ≥ 85% AFUE	0	1	3	4	6	7
Propane/Gas Boiler ≥ 90% AFUE	0	2	5	8	11	14
Propane/Gas Boiler ≥ 94% AFUE	0	3	7	10	14	17
Oil Boiler ≥ 85% AFUE	0	1	3	4	6	7
Oil Boiler ≥ 90% AFUE	0	2	5	8	11	14
Heat Pump 8.2 HSPF (11.5 EER)	0	1	2	5	7	7
Heat Pump 9.0 HSPF (12.5 EER)	0	2	5	10	11	12

Based on National Green Building Standard Section 703.4

