

Green Building Standards

The building industry currently utilizes a number of green building rating systems. These rating systems focus on providing a measurable way to quantify green building practices. This is an overview of the following standards and how Dimplex electric fireplaces fit in.

- Leadership in Energy and Environmental Design
- National Green Building Standard
- International Green Construction Code
- Energy Star – Qualified New Homes

Leadership in Energy and Environmental Design (LEED)

What is LEED?

LEED is a third party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings. Developed by the U.S. Green Building Council (USGBC) in 2000, LEED serves as a tool for buildings of all types and sizes. LEED certification offers third party validation of a project's green features and verifies that the building is operating exactly the way it was designed to.

How does it work?

building criteria. Within each of the LEED credit categories, projects must satisfy particular prerequisites and earn points. Currently there are 4 different certification levels that can be obtained by a builder:

Certified 40–49 points

Silver 50–59 points

Gold 60–79 points

Platinum 80 points and above

What is its impact on fireplaces?

Fireplaces are included in the Indoor Environmental Quality (EQ) section of the LEED for Homes Rating System.

How do Dimplex fireplaces fit in?

certification as they are seen as being equal to having no fireplace in the home. An electric fireplace does not reduce indoor air quality or burn fuel, therefore are not considered a fireplace.

National Green Building Standard (ICC-700)

What is ICC-700?

-recognizable standard definition of green building. The standard (ICC-700) defines green building practices for single and multifamily homes, residential remodeling projects, and site development projects.

How does it work?

The National Green Building Standard is a point-based system where projects earn points for meeting specific green building criteria. In order to attain a higher level of green certification by the NAHB Research Center, a home must accrue successively higher levels of minimum points in every category – the highest level of certification is dictated by the lowest category score level. The following tables highlight the point values required in each area for green buildings:

Green Building Categories		Performance Point Levels			
		BRONZE	SILVER	GOLD	EMERALD
1.	Ch 5: Lot Design, Preparation & Development	39	66	93	119
2.	Ch 6: Resource Efficiency	45	79	113	146
3.	Ch 7: Energy Efficiency	30	60	100	120
4.	Ch 8: Water Efficiency	14	26	41	60
5.	Ch 9: Indoor Environmental Quality	36	65	100	140
6.	Ch 10: Operation, Maintenance & Building Owner Education	8	10	11	12
7.	Additional Points from any category	50	100	100	100
Total Points		222	406	558	697

What is its impact on fireplaces?

on 901.2 of the ICC 700 rating system.

How do Dimplex fireplaces fit in?

While, electric fireplaces are not included in the existing ICC-700 standard; Dimplex has submitted an application to have electric fireplaces included in the next revision. It has been proposed that electric fireplaces are equal to having no fireplace in the home because they do not reduce indoor air quality or burn fuel to produce the flame effect and therefore should earn a total of 7 points.

International Green Construction Code (IGCC)

What is IGCC?

How does it work?

The IGCC is scheduled to be finalized by March 2012 and all states will have up to two years to meet or exceed the standard by modifying their individual building codes.

What is its impact on fireplaces?

Unvented fireplaces including alcohol burning fireplaces are prohibited. All fuel-burning fireplaces shall be vented outdoors. Combustion air for fuel-burning fireplace must come from outdoors. Vented gas fireplace shall be direct-vented outdoors. Wood-burning fireplaces shall be provided with combustion air directly from outdoors and shall be provided with a means to tightly close off the chimney flue and combustion air outlets when the fireplace is not in use.

Electric fireplaces are not restricted by the IGCC since they do not reduce the indoor air quality or burn fuel to produce the flame effect. All energy used within the building, including appliances plugged into a 110/120V receptacle will be included in the building's energy assessment; therefore electric fireplaces that use minimal energy are preferred.

Energy Star – Qualified New Homes

What is Energy Star?

home means that it is independently verified to be at least 15% more efficient than homes built to the International Energy Conservation Code.

How does it work?

To earn the Energy Star certification, a home must meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency (EPA), making them at least 15% more efficient than standard homes. Homes achieve this level of performance through a combination of energy-efficient improvements. To ensure that a home meets Energy Star's guidelines, third-party verification by a certified Home Energy Rater (or equivalent) is required.

What is its impact on fireplaces?

Fireplace products must meet the Energy Star Indoor Air Package Specification which specifies that combustion-venting systems must protect residents from potential exposure to combustion gases by installing properly vented fireplaces.

How do Dimplex fireplaces fit in?

The Energy Star program looks for products that will make a home substantially more energy efficient than homes that are built to minimum code requirements. Dimplex electric fireplaces are 100% efficient. Dimplex fireplaces do not use combustion to produce the flame, there are no air-pollutants emitted either inside or outside the dwelling and no moisture is introduced into the indoor environment. Electric fireplaces allow the homeowner to conserve energy by zone heating since they provides supplemental heat. It's greener to warm a single room, than to turn up a central heating thermostat.