804.1, 804.1.1

804.1 Fireplaces and appliances. Where located within buildings, fireplaces, solid fuel-burning appliances, vented decorative gas appliances, vented gas fireplace heaters and decorative gas appliances for installation in fireplaces shall comply with the International Mechanical Code, the International Fuel Gas Code and Sections 804.1.1 through 804.1.3. Unvented room heaters and unvented decorative appliances, including alcohol burning, shall be prohibited.

804.1.1 Venting and combustion air. Fireplaces and solid fuel-burning appliances shall be vented to the outdoors and shall be provided with combustion air provided from the outdoors in accordance with the International Mechanical Code and the International Fuel Gas Code. Solid-fuel burning Fireplaces shall be provided with a means to tightly close off the chimney flue and combustion air openings when the fireplace is not in use.

Reason: Unvented gas heaters include both room heaters and several types of hearth products—all listed to the same stringent ANSI safety performance standard, Z21.11.2. Two primary criteria exist for these products to be considered green: first, their energy efficiency performance and second, their impact on indoor air quality.

When considered from a site or point-of-use standpoint, unvented heaters and hearth products are more energy efficient than any gas, wood or biomass appliance allowed by the IgCC. When considered from a “source energy” standpoint, unvented heaters and hearth products are more energy efficient than any electric appliance allowed by the IgCC. The code should not disallow the most energy efficient heating appliance available to architects, contractors, and owners.

Unvented heaters and hearth products meet nationally recognized indoor air quality guidelines of the federal government. Compliance of these products with the national guidelines has been repeatedly confirmed by peer-reviewed research such as that performed by the University of Illinois.

The proposed change to 804.1.1 is needed because the definition of “FIREPLACE” in Chapter 2 is limited to solid fuel-burning equipment. There is no need for the modifier “solid fuel burning” because it begs the question of what other types of fireplaces there may be.

Bibliography:
Final Report on Combustion Product Concentrations of Unvented Gas Fireplaces

Cost Impact: Will not increase the cost of construction.