

Site Evaluation Worksheet for Flammable Gas Storage Stationary Hydrogen Fuel Cells

2006 editions of the International Building Code, International Mechanical Code and International Fuel Gas Code which have references to the International Fire Code.

Typical hydrogen storage siting criteria for quantities less than 4,226 standard cubic feet (scf) and 4,226 to 21,125 scf. <i>This information is provided as a service by Plug Power. Interpretation by the Authority Having Jurisdiction (AHJ) will determine final setback distances.</i>		Controlling Code	Setback < 4,226 scf^a	Setback 4,226 to 21,125 scf^a
Telecom Cabinets, Enclosures, and Telecom Equipment ^b	RT cabinet; CPS cabinet; Power Pedestal; Transfer/Disconnect switches; BTS; BSC; AC meter	Recommend	5 ft	10 ft
Buildings on the same property ^c	Non-rated construction or openings within 25 feet	IFC Table 3504.2.1	5 ft	10 ft
	2-hour construction and no openings within 25 feet	IFC Table 3504.2.1	0 ft	5 ft
	4-hour construction and no openings within 25 feet	IFC Table 3504.2.1	0 ft	0 ft
Underground flammable or combustible liquid storage, distance to vent or fill opening ^b		Recommend	5 ft	10 ft
Ignition sources (including appliance burner igniters, hot work and hot surfaces capable of igniting flammable vapors) ^b		Recommend	5 ft	10 ft
Overhead Electric utilities ^b	Overhead electric wire	Recommend	5 ft	10 ft
	Overhead bus, trolley or train wire	Recommend	5 ft	10 ft
Public streets, public alleys, or public ways ^c		IFC Table 3504.2.1	5 ft	10 ft
Public sidewalks and parked vehicles ^b		Recommend	5 ft	10 ft
Distance to lot lines of property that can be built upon ^c		IFC Table 3504.2.1	5 ft	10 ft
Dry vegetation and combustible materials ^c		IFC 2703.12/ 2704.11	15 ft	25 ft
Air intake openings ^b		Recommend	5 ft	10 ft
Above ground flammable or combustible liquid storage ^b	Diked, distance to dike	Recommend	5 ft	10 ft
	Not diked, distance to tank	Recommend	5 ft	10 ft
Additional flammable gas storage areas ^c		IFC Table 3504.2.1	5 ft	10 ft

- a. The minimum required distances shall not apply when fire barriers without openings or penetrations having a minimum fire-resistance rating of 2 hours interrupt the line of sight between the storage and the exposure. The configuration of the fire barrier shall be designed to allow natural ventilation to prevent the accumulation of hazardous gas concentrations.
- b. These distances are recommended based upon the distances contained within IFC Table 3504.2.1.
- c. These distances are specified in the International Fire Code, 2006 edition.