

Area Classifications

Hazardous (Classified) Locations In Accordance with Article 500, National Electrical Code

Class I

Combustible material in the form of a gas vapor.

Class II

Combustible material in the form of a dust.

Class III

Combustible material in the form of a fiber, such as a textile flyings.

The Group sub-divides the Class:**Group A**

Atmosphere containing acetylene.

Group B

Atmospheres containing hydrogen, gases or vapors of equivalent hazards, such as manufactured gas.

Group C

Atmospheres containing ethyl ether vapors, ethylene or cyclopropane.

Group D

Atmospheres containing gasoline, hexane, naphtha, benzine, butane, propane, alcohol, acetone, benzol, lacquer, solvent vapors, or natural gas.

Group E

Atmospheres containing metal dust, including magnesium and their commercial alloys, and other metals of similarly hazardous characteristics.

Group F

Atmospheres containing carbon black coal or coke dust.

Group G

Atmospheres containing flour, starch or grain dust.

Division 1

locations are those places where ignitable concentrations of flammable gases or vapors exist under normal conditions, or may frequently exist because of leakage or maintenance operations or where malfunctions may release ignitable vapors and simultaneously cause failure of electrical equipment.

Division 2

locations are those where flammable liquids or gases are present but are normally confined and can escape only through accident or abnormal operation. Also included are areas made safe by mechanical ventilation, but might become hazardous because of failure or abnormal operation of the equipment. A third division 2 situation is an area adjacent to a Division 1 location where ignitable concentrations of gas or vapor might be occasionally communicated.

Note: The Division defines the probability of an explosive mixture being present (e.g. A hazardous mixture is normally present in a Division 1 area, but will only be accidentally present in a Division 2 area.