

National Electric Code (NEC)

Class I

Any location in which flammable gases or vapors are or may be present in the air in sufficient quantities to produce an explosive or ignitable mixture.

Class I, Division 1

Locations in which:

1. Ignitable concentrations of flammable gases or vapors exist under normal operating conditions.
2. Ignitable concentrations of such gases or vapors may exist frequently because of repair or maintenance operations, or because of leakage.
3. Breakdown or faulty operation of equipment or process might release ignitable concentrations of flammable gases or vapors, and might also cause simultaneous failure of electrical equipment.

Class I, Division 2

Locations in which:

1. Volatile liquids or flammable gases are handled, processed, or used, but in which the liquids, vapors, or gases will normally be confined in containers or closed systems from which they can escape only in the case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment.
2. Ignitable concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment.
3. Is adjacent to a Class I, Division 1 location and to which ignitable gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

Class II

Any locations that are hazardous because of the presence of combustible dust.

Class III

Any locations that are hazardous because of the presence of easily ignitable fibers or flyings, but in which such fibers or flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.