



**Alfalab
Control**

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This is a reference list of certification standards that can be useful for hazardous locations design.

Please note that certain standards in this list may no longer be current. They are listed here for reference, and to support those applications that still require certification to the older standards.

Generally, standards must be purchased. This might be done via their issuing organization, or by various distributors and resellers.

As web sites change frequently, we are not able to provide links. For assistance in identifying or locating standards relevant to your application, please [contact us](#).

Harmonized Standards

IEC 60079-0: General requirements

IEC 60079-1: Equipment protection by flameproof enclosures "d"

IEC 60079-2: Equipment protection by pressurized enclosure "p"

IEC 60079-5: Equipment protection by powder-filling "q"

IEC 60079-6: Equipment protection by liquid immersion "o"

IEC 60079-7: Equipment protection by increased safety "e"

IEC 60079-11: Equipment protection by intrinsic safety "i"

IEC 60079-13: Equipment protection by pressurized room "p" and artificially ventilated room "v"

IEC 60079-14: Electrical installations design, selection and erection

IEC 60079-15: Equipment protection by type of protection "n" (nA, nL, nC, nR)

IEC TR 60079-16: Artificial ventilation for the protection of analyzer houses

IEC 60079-18: Equipment protection by encapsulation "m"

IEC 60079-25: Intrinsically safe systems

IEC 60079-26: Equipment with Equipment Protection Level (EPL) Ga

IEC 60079-28: Protection of equipment and transmission systems using optical radiation

IEC 60079-29: Performance requirements for gas detection systems

IEC 60079-31: Equipment dust ignition protection by enclosure "t"

IEC TS 60079-32-1: Electrostatic hazards

IEC TS 60079-40: Requirements for process sealing between flammable process fluids and electrical systems

IEC TS 60079-43: Equipment in adverse service conditions

ISO/IEC 80079-34: Application of quality systems for equipment manufacture



Fire Testing



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UL

ISO/IEC 80079-36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO/IEC 80079-37: Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
ISO/IEC 80079-38: Equipment and components in explosive atmospheres in underground mines
IECEX OD 017: Drawing and documentation guidance for IEC Ex certification
UL 674: Electric Motors and Generators for Division 1
UL 783: Flashlights and Lanterns
UL 823: Electric Heaters
UL 844: Luminaires
UL 913: Intrinsically Safe Apparatus
UL 1203: Explosion-Proof and Dust-Ignition-Proof Apparatus
UL 2208: Solvent Distillation Units
UL 2225: Cables and Fittings
UL 60079 series: Equipment for explosive atmospheres

NFPA

NFPA 30: Flammable and Combustible Liquids Code
NFPA 33: Spray Application Using Flammable or Combustible Materials
NFPA 34: Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids
NFPA 36: Solvent Extraction Plants
NFPA 37: Stationary Combustion Engines and Gas Turbines
NFPA 61: Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities
NFPA 68: Explosion Protection by Deflagration Venting
NFPA 69: Explosion Prevention Systems
NFPA 70: National Electrical Code
NFPA 77: Recommended Practice on Static Electricity
NFPA 91: Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids
NFPA 484: Combustible Metals
NFPA 496: Purged and Pressurized Equipment
NFPA 497: Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
NFPA 499: Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
NFPA 652: Standard on the Fundamentals of Combustible Dust



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CSA

NFPA 654: Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids

NFPA 664: Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities

NFPA 820: Fire Protection in Wastewater Treatment and Collection Facilities

NFPA 1981: Open-Circuit Self-Contained Breathing Apparatus for Emergency Services (SCBA)

NFPA 1982: Personal Alert Safety Systems (PASS)

C22.2 No. 30: Explosion-Proof Enclosures

C22.2 No. 152: Combustible Gas Detectors

C22.2 No. 157: Intrinsically Safe and Non-Incendive

CSA 60079 series: Equipment for explosive atmospheres

CSA M421 (2011) - Use of electricity in mines

FM

FM 3600: General Requirements

FM 3610: Intrinsically Safe Apparatus

FM 3611: Nonincendive Electrical Equipment

FM 3613: Flashlights and Lanterns

FM 3615: Explosionproof Electrical Equipment

FM 3616: Dust-Ignition-Proof Equipment

FM 3620: Purged/Pressurized

FM 3640: Land Mobile Radios

FM 3650: Submersible Motors

FM 7320: Electric Heaters

FM 7730: Flameless Explosion Venting

FM 7910: Spark Resistant Tools

API

API RP 14F: Design, Installation, and Maintenance of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class 1, Division 1 and Division 2 Locations

API RP 14FZ: Recommended Practice for Design, Installation, and Maintenance of Electrical Systems for Fixed and Floating

Offshore Petroleum Facilities for Unclassified and Class I, Zone 0, Zone 1, and Zone 2 Locations

API RP 500: Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2

API RP 505: Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2

API RP 2003: Protection Against Ignitions Arising Out of Static,





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ASTM

European Union
(CE)

Lightning, and Stray Currents

API RP 2214: Spark Ignition Properties of Hand Tools

ASTM F2876-10: Thermal Rating and Installation of Internal Combustion Engine Packages for use in Hazardous Locations in Marine Applications

ATEX Directive 2014/34/EU

EN 13463-1: Basic method and requirements

EN 13463-2: Protection by flow restricting enclosure 'fr'

EN 13463-3: Protection by flameproof enclosure 'd'

EN 13463-5: Protection by constructional safety 'c'

EN 13463-6: Protection by control of ignition source 'b'

EN 13463-8: Protection by liquid immersion 'k'

EN 14373: Explosion suppression systems

EN 14460: Explosion resistant equipment

EN 14491: Dust explosion venting protective systems

EN 1834-1: Safety requirements for design and construction of engines for use in potentially explosive atmospheres

EN 14797: Explosion venting devices

EN 16009: Flameless explosion venting devices

EN 60079-0: General requirements

EN 60079-1: Equipment protection by flameproof enclosures "d"

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EN 60079-14: Electrical installations design, selection and erection

EN 60079-15: Equipment protection by type of protection "n"

EN 1634 - Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware

This is a multi-part document divided into the following parts:

Part 1 Fire resistance tests for door and shutter assemblies.
Fire doors and shutters

Part 2 Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware. Fire resistance characterisation test for elements of building hardware

Part 3 Fire resistance tests for door and shutter assemblies.





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Smoke control doors and shutters

(nA, nL, nC, nR)

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EN 60079-26: Equipment with Equipment Protection Level (EPL) Ga

EN 60079-28: Protection of equipment and transmission systems using optical radiation

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EN 60079-31: Equipment dust ignition protection by enclosure "t"

EN 80079-34: Application of quality systems for equipment manufacture

EN ISO 80079-36: Non-electrical equipment for explosive atmospheres - Basic method and requirements

EN ISO 80079-37: Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"

EN ISO 80079-38: Equipment and components in explosive atmospheres in underground mines

United Kingdom
(UKCA/UKEX)

BS EN IEC 60079-0: General requirements

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	BS EN ISO 80079-36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
	BS EN ISO 80079-37: Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
	BS EN ISO/IEC 80079-38: Equipment and components in explosive atmospheres in underground mines
TIA	TIA-4950: Requirements For Battery-powered, Portable Land Mobile Radio Applications In Class I, II, And III, Division 1, Hazardous (Classified) Locations
Customs Union	CU TR 004: Low-voltage equipment CU TR 010: Machinery and equipment CU TR 012: Equipment for explosive atmospheres GOST 2.610: Guidelines for Operational Documents GOST 31610.0: Equipment for explosive atmospheres - General requirements GOST IEC / GOST R 60079 series: Equipment for explosive atmospheres GOST R 80079-34: Application of quality systems for equipment manufacture GOST IEC 80079 series: Non-electrical equipment for explosive atmospheres GOST R EN 1127 series: Explosion prevention and protection GOST R EN 13463 series: Non-electrical equipment
Offshore and Marine	International Maritime Organization MODU Code SOR-95-191: Nova Scotia Offshore Petroleum Installation Regulations SOR-95-104: Newfoundland Offshore Petroleum Installations Regulations DNVGL-ST-E272 (DNV 2.7-2): Offshore service modules DNVGL-ST-E273 (DNV 2.7-3): Portable offshore units
South Africa	SANS 868-1-1: Compression-ignition engine systems and machines for use in mines – Basics SANS 868-1-2: Compression-ignition engine systems and





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machines for use in mines - Explosion protected engines
SANS 868-1-3: Compression-ignition engine systems and
machines for use in mines - Machines

Department of
Energy

DOE-STD-1212-2012: Explosives Safety

Department of
Defense

MIL-STD-801G: Environmental Engineering and Laboratory
Tests

ASTM D1204 – Dimensional Stability Report

NFPA 701 Flame Spread Test – Flame Propagation of Textiles and Films

ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials

NFPA 701-2015: Page 1, 2 & 3 – Standard for Flame Tests of Flame Resistant Fabrics & Film,
Large Flame Tee, Single Sheet Specimen

FIRE TESTING



Fire Testing