Fire (FS)

Fire risks

Safety Code

**E - Fire protection (1995) en fr**

This code sets out the fire prevention and protection rules and procedures to be followed in order to ensure primarily the safety and well-being of anyone and to protect the property on CERN's premises. It lays down the procedures to be observed concerning the construction, alteration and use of buildings or installations, the safety standards for furniture and contents of buildings and the procedure applicable to the fire permit for work with "hot" tools. It gives information on fire-detection and extinguishing appliances and provides essential information in the event of a fire.

Safety Instruction


This instruction is based on the latest standards and recommendations to ensure a very high level of safety against hazards associated with smoke, toxicity and corrosivity from burning plastics. It summarizes the required properties for the different materials and cable types and is applicable to all types of cables and wires and other insulated parts to be used in CERN installations.
IS 41 - The use of plastic and other non-metallic materials at CERN with respect to fire safety and radiation resistance (2005)
This instruction is intended to ensure a very high level of safety and must be applied to all new installations at CERN, including modifications to existing installations. CERN attaches great importance to the hazards associated with the density, toxicity and corrosiveness of smoke from burning plastics. The document is complemented by tables of standards and specifications for the selection of plastics, and guidelines for their use.

IS 48 - Fire prevention for cables, cable trays and conduits (2001)
This Safety Instruction defines rules and other preventive measures for cable fires. It lists the most common fire risks for cables and conduits. Mandatory precautions are specifically aimed at preventing cable fires in physics experiments where confined spaces, higher vicinity risks and lack of effective electrical protections add up to an increased risk of ignition.

Safety Note

NS 3 - Fire prevention for enclosed spaces in large halls (2001)
Recommendations for the choice of materials, installations and use of these large halls, and reminder of fire prevention actions to be taken.

NS 28 - CERN exhibition fire precautions (2002)
This Safety Note is intended to lay down the safety precautions to be respected by exhibitors to ensure the safety of persons present in a CERN building where a temporary exhibition is being arranged.

This Safety Note describes the safety requirements for design, construction and use of insulated core (sandwich) panels structures. It also gives complementary measures for the adoption, as insulating core, of materials whose use is restricted by the Safety Instruction IS 41.
### Safety Guideline

**Safety Guideline FS-0-0-1 - Office buildings fire protection**

This document provides a summary of the fire Safety requirements applicable to "office buildings" at CERN. These requirements are based on the French and Swiss legislation and standards.

**Safety Guideline FS-0-0-2 - Smoke extraction systems**

To provide guidance for compliance with Fire Safety requirements for smoke extraction systems installed in surface buildings located in French territory.

### Safety Form

**Fire Permit**

The FIRE PERMIT is drawn up in order to prevent the risk of fire or explosion created by ‘hot’ tools (mainly welding torches and electric arc-welding equipment). For every item of work of this kind, the person who execute it must be an authorised operator and must be in possession of a properly completed and signed FIRE PERMIT. It does not apply to work done at permanent work-stations at CERN. CERN's endorsement does not in any way release the operator from his responsibilities. Also see code E.

### Other documents of interest

**Evacuation procedure and principles for CERN sites on French territory**

In some cases the regulatory framework of a certain domain can be exhaustive and challenging to implement. This document provides further interpretation on CERN safety requirements, related to evacuation procedure and principles on the French territory of the CERN site, as well as recommendations on best practices to be used on CERN sites.