

Requirements and preconditions for fire safety cabinets in accordance with NEN-EN-14470-1

The NEN-EN-14470-1 standard has three categories of fire resistance, namely 30, 60 and 90 minutes. Depending on the application of a fire safety cabinet, a specific category must be chosen.

The fire resistance category is determined by the quantity and nature of the substances and/or the risk of damage to a room or area.

The overview below (source: PGS15: 2016 Appendix F Requirements for fire safety storage cabinets) looks at the various requirements associated with the category of the fire safety cabinet in question.

Fire safety cabinets that have been used since 1 January 2006 must comply with the NEN-EN-14470-1 standard. Fire safety cabinets that were entered into service before 1 January 2006 must comply with the NEN 2678 standard.

For more information also see chapter 3.3. Fire safety storage cabinets (General Provisions Environmental Law [Wabo], Occupational Health and Safety Administration) in [PGS15:2016](#).

In accordance with	NEN 2678	NEN-EN-14470-1 Type 30	NEN-EN-14470-1 Type 60	NEN-EN-14470-1 Type 90
Fire resistance	40 min Safety period	30 min	60 min	90 min
Max. quantity (L)	150	150	250	250
Storage of the following hazardous substances:	2 ^a , 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9	3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9	2 ^a , 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9	2 ^a , 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9
	CMR substances Class 5.2 in accordance with PGS 8 ^b	CMR substances Class 5.2 in accordance with PGS 8 ^b	CMR substances Class 5.2 in accordance with PGS 8 ^b	CMR substances Class 5.2 in accordance with PGS 8 ^b
Substance separation of incompatible combinations	Can take place by placing the different categories of substances in separate drip trays. A drip tray must be present for each category to be compartmentalised	Can take place by placing the different categories of substances in separate drip trays. A drip tray must be present for each category to be compartmentalised	Can take place by placing the different categories of substances in separate drip trays. A drip tray must be present for each category to be compartmentalised	Can take place by placing the different categories of substances in separate drip trays. A drip tray must be present for each category to be compartmentalised

^a Class 2: In so far as aerosols (UN 1950) and gas cartridges (UN 2037) are concerned.

^b Unless chapter 9 is complied with.

The organisation must be in possession of a product certificate for the fire safety cabinet of which the first use took place after 1 January 2006.

It must be evident to both the user and the supervisory authorities which fire safety standard the cabinet meets alongside which performance. In accordance with EN-14470-1 standard, the following information must be displayed on the front (outside) of the cabinet in a clearly visible location:

- Close doors (when the cabinet is not in use);
- Hazard symbol <Fire, open flame, smoking prohibited> in accordance with ISO 3864;
- Hazard symbol <Flammable substances> in accordance with ISO 3864;
- The applicable standard, for cabinets from May 2004: EN-2678 or NEN-EN-14470-1;
- The level of fire resistance, indicated in type 30, 60 or 90 in NEN-EN-14470-1 and a safety period of 40 minutes in NEN 2678.

The following information must also be included in or on the cabinet:

- Name or brand of the producer;
- model number and year of production;
- maximum permitted packaging;
- maximum shelf load.

To demonstrate that the cabinet has actually been tested as a type, the supplier must also provide a test report with the cabinet. This test report consists of a summary of research that refers to the complete test report and a description of the result. This summary must be printed on a document bearing the logo and name of the research institute that carried out the test. The research institute must be an institution accredited for that operation.

In addition, the following rules apply during use:

- Fire safety cabinets must **always** be connected to a ventilation duct and be extracted.
- New fire safety cabinets must comply with the **NEN-EN-14470-1** standard.
- Fire safety cabinets must be placed at least **one meter away from doors or other escape routes**.
- Fire safety cabinets may **not** be used for screening off areas.
- The Environmental Permit (VoH) provides that the USPB may deviate from regulation 3.3.3 of PGS15:2016. This means, **more than two fire safety cabinets may be set up on one floor per fire compartment at the USPB, provided that the total amount of hazardous substances stored is equal to or less than the maximum permitted amount of two fire safety cabinets (500 kg and/or litre)**.