

Fire safety requirements for events in the main hall and foyers of the main building **HG** of ETH Zurich

Scope

This information sheet applies to the use of the exhibition spaces and foyers of the HG. It is intended for tenants and users of these spaces and is to be viewed as a supplement to the Rectorate's directive and the event permit. Furthermore, the instructions of responsible persons in the Operations Department and the Safety, Health and Environment (SGU) Department must be followed. Further requirements by authorities remain reserved.

Keep escape routes / doors clear

- Exhibition areas are those listed in the Areas designated in the escape route plans.
www.plan.ethz.ch (netbz login)
- Fire service access, escape and rescue routes must be kept clear at all times.
- Escape routes must have a minimum light width of 1.20 m.
- Doors must not be blocked with wedges or similar.

Exhibition facilities / Materials

- The installation of 22 non-combustible partition walls per side is permitted on the long sides of gallery levels F and G.
Other uses are not permitted.
- Display elements or decorations must not obstruct the view of escape route signs.
- Exhibition facilities including roll-ups (excl. Exhibits) must have at least fire index BKZ 6q3 or be in fire behavior group RF1.
- Alternative concepts with flame-retardant materials of categories BKZ 5.2 or RF2 can be submitted to the SGU for review, including a plausible [fire load calculation](#).

Further editions

- The additional conditions from the Services approval letter must be observed.
- The applicable VKF fire protection regulations and the information sheets of the fire department of the city of Zurich must also be taken into account.

Electrical devices / installations

- Electrical lighting fixtures must have the safety distances from flammable materials specified by the manufacturer.
- For electrical installations, a Safety case (SiNa) must be carried out.
- Electrical devices such as projectors, televisions, etc. may only be operated during the opening hours of the main building and must comply with SN EN 60950, SN EN 62368 or SN EN 60065.
- The use of fog machines, Pyrotechnics or similar devices are prohibited throughout the main building.

Height restrictions

- In the main building there are various areas with Equipped with linear fire detectors. In these areas, the installation of high screens and the like is only possible if the linear detectors are not interrupted.
- Assembly and dismantling must be coordinated with the operations department.
- Clarifications regarding the installation height are the responsibility of the organizer.

Fire load calculation

- The following key figures are decisive as a basis for a fire load calculation:

Main hall E4	80 MJ/	250 MJ/m ²
Foyers	m ²	
- A plausible calculation of the fire load must be enclosed with the event application. If critical fire loads are expected, the Zurich City Fire Department must be consulted in consultation with the SGU. In such cases, the SGU or the Fire Department may require additional protective measures, such as fire watch.

Terms and definitions

Exhibition facilities	Tables, partition walls, pedestals and other constructions required for exhibiting the objects (excluding electrical devices)
Fire index	Material properties in the event of fire, which were used until the end of 2014. With the manufacturer's certificate, the product is accepted by SGU. 6 non-combustible, 6q3 virtually non-combustible, 5.2 flame-resistant, 4 combustible.
Fire behavior group	Fire contribution of the material in the event of a fire according to the new VKF standard. RF1 no fire contribution, RF2 low fire contribution, RF3 permissible fire contribution. The admissibility of building materials is regulated in the fire protection guideline "Use of Building Materials."

Fire index / fire behavior / Fire loads	Product examples without guarantee of completeness	Fire code	Fire behavior	calorific value		mass
Hardwoods	Maple, beech, alder, ash, cherry, walnut, etc.	4	RF3	17.8	MJ/kg	~600 – 680 kg/m ³
	Oak, Robinia (false acacia) Afromosia, Afzelia (Doussie), Bilinga, Iroko, Laman, Makore, dark red meranti, sapelli, sipo, teak, wenge	5.2	RF2	16.8	MJ/kg	~680 kg/m ³
Softwoods	Spruce, fir, larch, pine, Douglas fir, Swiss stone pine, red cedar	4	RF3	20.4	MJ/kg	~410 – 550 kg/m ³
Cement or gypsum-bound Chipboard	Sasmox, Duripanel	6q3	RF1	1.88	J/kg	1250 kg/m ³
Fiber-bonded gypsum boards	Fermacell / plasterboard	6	RF1	1.1	J/kg	1150 kg/m ³
Wood fiberboard	Hard, medium-hard and porous fiberboards (MDF)	4	RF2/ RF3	5:00 PM	MJ/kg	~720 kg/m ³
	Single-layer and multi-layer solid wood panels, Cross-laminated timber panels	4	RF3	~ 6:00 PM	MJ/kg	
	Boards made of long, slim aligned chips (OSB, Oriented Beach Board) standard	4	RF3	~ 16.70	MJ/kg	~550 - 660 kg/m ³
Chipboard	flame-retardant	4	RF3	19.20	MJ/kg	~660 kg/m ³
		5.2	RF2	16.70	MJ/kg	~660 kg/m ³
Plywood panels	Standard birch	4	RF3	15.58	MJ/kg	~680 kg/m ³
aluminum composite panels	Alucobond plus 4mm 3mm	5.3	RF2	68.9 47.6	MJ/m ² MJ/m ²	
	Alucobond A2	6q3	RF1	-	-	
Plastic panels	Forex B1 5mm	5.2	RF2	37	MJ/m ²	
screen device	EN 60950 or EN 60065			138	MJ/St k	
Computer with printer	EN 60065			100	MJ/St k	
Electrical appliances	EN 60950 or EN 60065			10	MJ/kg	

When calculating fire load, the fire protection certificates of the products used must always be presented.

Fire watches	Personnel who have appropriate instructions for evacuation or other necessary measures in the event of an incident. They are trained in the use of firefighting equipment and are able to use it.
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Decorations	Decorations include tablecloths, posters, and other materials used for decorative purposes. Due to public traffic, all decorations must either belong to fire behavior group RF2 or have a fire index of at least BKZ 5.2. There are no requirements for tablecloths, except in the lecturers' foyer.
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Escape routes	Escape route plans are available at www.plan.ethz.ch (nethz login). They are current as of the date shown on the plan.
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Linear detector	Fire detector with an invisible light beam, often used in atriums. The beam of the linear detector must not be interrupted.
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extinguishing equipment

No fire extinguishing equipment is provided by SGU.
Recommendations for the provision of fire extinguishing equipment:

Fire class hand-held fire extinguisher		AWAY	C	F	LiPo
	fire blanket	Water mist extinguisher	CO2 extinguisher	Grease fire extinguisher	F500
Charcoal grill	ÿ	ÿ			
Cooking area / stove top / warming devices Coffee machines Gas	ÿ		ÿ		
appliances	ÿ		ÿ		
Solid flammable materials, e.g. Exhibits Deep fryers		ÿ			
	ÿ			ÿ	
Candles (only permitted in glasses)	ÿ				
Batteries / Li-Po					ÿ

Warming device

Device for keeping food warm. Devices with fuel paste must not be used in escape routes.

Zurich in October 2022