

### Directorate for Real Estate and Facility Management

Guidelines for Organisers and Exhibitors

# Choice of Materials for Events and Exhibitions at the University of Zurich

Version 22-03, 16th of August 2022

Publisher University of Zurich, Directorate for Real Estate and

Facility Management, Office for Safety, Security and

Environment

Source https://www.ib.uzh.ch/de.html



## **Revision History**

Date	Version	Chapters	Remark
14.09.2020	20-01	all	Enactment of the document by the office for Fire Prevention and Emergency Organisation
16.02.2022	22-01	all	Additions in chapter 3, revision of the glossary
12.07.2022	22-02	3 and 4	Correction of norm
16.08.2022	22-03	5	Additional contact information

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#### 1 General

Disclaimer: This is a translation of the original document in German. It is provided for information purposes only and has no legal bearing.

#### 1.1 Scope

These guidelines define which types of materials are allowed for usage at events and exhibitions at the University of Zurich. They are binding for both internal and external organisers.

Those who are responsible for the organisation of the events are required to send a full bill of materials to the host. Any questions and possible problems are to be discussed with the fire prevention officer of the University of Zurich. See chapter 5 for contact information.

#### 1.2 Deviations

Should any circumstances arise which necessitate a deviation from these guidelines when organising an event, it is required to get a permission from the UZH fire prevention officer beforehand. See chapter 5 for contact information.

#### 1.3 Legal Basis

These UZH guidelines are based on the fire prevention norms by the VKF<sup>1</sup>. Those are legally binding and to be followed.

<sup>&</sup>lt;sup>1</sup> VKF: Vereinigung Kantonaler Feuerversicherungen (Association of Cantonal Fire Insurances)

## 2 (Building) Materials

The list of materials below is neither complete nor final. Should any materials be used, which are not listed below, it is required to contact the UZH fire prevention officer beforehand. See contact information in chapter 5.

In both vertical and horizontal escape routes<sup>2</sup> only materials of the fire behaviour group RF1 are allowed. In buildings of special, open construction (for example KOL and Y24) materials of the group RF2 can be used under the condition that its usage is discussed with the fire prevention officer of the University of Zurich prior to the event.

The usage of materials belonging to all other groups is exclusively allowed within rooms.

#### 2.1 Permissible (Building) Materials

-5	Item or description of material	Technical Requirements	Fire behaviour group
and	Aluminium and aluminium alloys	-	RF1
events routes)	Concrete, concrete additives, gas concrete, lead, iron, steel, stainless steel, fibrous cement	-	RF1
or e	Gypsum and gypsum-based plaster	-	RF1
terials for in escape	Glass, ceramic glass, foam glass	-	RF1
in e	Quicklime, calcium silicate, ceramics	-	RF1
- E	Mineral additives, mineral wool, mortar with inorganic binding agents	-	RF1
ildir (onl	Natural stones, clay, cement	-	RF1
ussible (building exhibitions (only	Terrazzo	-	RF1
issibl	Vermiculite	-	RF1
ermi	Zinc and zinc alloys	Non-dispersed	RF1
	Copper and copper alloys	Non-dispersed	RF1

<sup>&</sup>lt;sup>2</sup> Stairwells are considered vertical escape routes and corridors are considered horizontal escape routes.

suc	Item or description of material	Technical Requirements	Fire behaviour group
ents and exhibition rtes)	Plasterboard / SN EN 520 Paper / SN EN ISO 536	Density $\geq 800 \text{ kg/m3}$ Thickness $\geq 6.5 \text{ mm}$ Paper weight $\leq 220 \text{ g/m2}$ ( $\leq 5\%$ inorganic additives)	RF1
	Cement-bonded particle board	Density ≥ 1200 kg/m3 Thickness ≥ 10 mm Content of cement ≥ 75% by mass	RF1
or ev pe rou	Phenolic and formaldehyde resins	-	RF2
sible (building) materials (only RF1 in esca	PTFE ("Teflon")	-	RF2
	Decorations, blinds, and tablecloths	-	RF2
	Deciduous trees	Oak, robinia, afrormosia, afzelia, bilinga, iroko, makore, teak, meranti, sapele, sipo, wenge	RF2
	Parquet and wood flooring	Sealed or oiled parquet, maple, beech, oak, ash	RF2
		Wood flooring made of RF2 material	RF2
	Plastic plates	Forex B1 5mm	RF2
Per	Particle board	Only if certified RF2	RF2

## 2.2 Prohibited (Building) Materials

	Item or description of material	Technical Requirements	Fire behaviour group
oms	Deciduous trees	Maple, beech, alder, ash, cherry, walnut	RF3
sed ro	Coniferous trees	Spruce, fir, larch, red cedar, arolla pine	RF3
de of clo	Wood fibreboard	MDF, hard and porous fibreboard Density ≥ 230 kg/m3	RF3
s outsi	Solid wood panels	Solid wood panels, cross- laminated timber plates	RF3
ion	OSB		RF3
hibil	Plywood	Plywood panels	RF3
s and ex	CV-Floorings / SN EN 653	Minimum weight = 1000 g/m2 Maximum weight = 2800 g/m2 Minimum thickness = 1,1 mm	K H 3 LCT
r event	Parquet and wood flooring	Wood floorings made of RF3 material	RF3
terials fo	Elastomer floorings with smooth surface / SN EN 1817	Minimum weight = 3000 g/m2 Maximum weight = 6000 g/m2 Minimum thickness = 1,8 mm	
ding) ma	Elastomer floorings with smooth surface and foam backing / SN EN 1816	Minimum weight = 3400 g/m2 Maximum weight = 4300 g/m2 Minimum thickness = 4 mm	
ible (buil	Elastomer floorings with moulded surface of SN EN 12199	Minimum weight = 4600 g/m2 Maximum weight = 6700 g/m2 Minimum thickness = 2,5 mm	
Impermissible (building) materials for events and exhibitions outside of closed rooms	PVC tiles of medium elasticity / SN EN 654	Minimum weight = 4200 g/m2 Maximum weight = 5000 g/m2 Minimum thickness = 2 mm	
II	Linoleum on cork backing / SN EN 687	Minimum weight = 2900 g/m2 Maximum weight = 5300 g/m2 Minimum thickness = 2,5 mm	

Item or description of material	Technical Requirements	Fire behaviour gro
Linoleum flooring / SN EN 548	Minimum weight = 2300 g/m <sup>2</sup> Maximum weight = 4900g/m <sup>2</sup> Minimum thickness = 2 mm	
Silicone elastomer		RF3 (cr)
PVC floorings with backings based on cork / SN EN 652	Minimum weight = 3400 g/m <sup>2</sup> Maximum weight = 3700 g/m <sup>2</sup> Minimum thickness = 3,2 mm	
PVC flooring with foam backing / SN EN 651	Minimum weight = 1700 g/m <sup>2</sup> Maximum weight = 5400 g/m <sup>2</sup> Minimum thickness = 2 mm	
Wood-based panels (density ≥ 580 kg/m3)	-	RF3
Polypropylene (PP)	-	RF3 (cr)
Cellulose-Acetate (CA)	-	RF3
Epoxy resin (EP)	-	RF3 (cr)
Polymethylmethacrylate (PMMA)	-	RF3
Polychloroprene (neoprene)	-	RF3 (cr)
Fibreglass	-	RF3 (cr)
Polystyrene (PS)	-	RF3 (cr)
Soft polyvinylchloride	-	RF3 (cr)
Polyvinylchloride, flexible polyurethane foam	-	RF3 (cr)
Polyethylene (PE)	-	RF3
Hard polyvinylchloride	-	RF2 (cr)
Polyvinylidene chloride (PVDC)	-	RF2 (cr)

#### 2.3 Usage of electronic devices

The mounting of video systems, monitors and similar devices in escape routes is only allowed, if the required minimum width of the escape route can be guaranteed at all times and if the device is manufactured in accordance with one of the following norms:

#### 2.3.1 Norms

- 1. SN EN 62368-1:2014 Audio/video, information and communication technology equipment Part 1. Safety requirements
- 2. SN EN 60950-1+A11+A1+A12+A2-AC:2011 Information technology equipment Safety Part 1: General requirements
- 3. SN EN 60065+A1+A11+A2+A12:2011 Audio, video and similar electronic apparatus. Safety requirements

## 3 Certifications

Each inquiry towards the office for Fire Prevention and Emergency Organisation concerning events and exhibitions at the University of Zurich needs to include the certifications of the used materials and items.

#### Important!

Only certifications issued in accordance with the VKF or with SN EN 13501-1:2009 can be accepted and approved.

Other certifications like B1 or B2 cannot be accepted.

When requesting the certificates from the exhibitors and manufacturers it is necessary to verify the validity of the certificate. Notably certificates whose validity expired, cannot be accepted.

The relevant authority which issued the permit for the space, is responsible for informing the organisers and exhibitors about these guidelines.

## 4 Glossary

Fire behaviour group	Classification according to VKF fire index	Classification according to SN EN 13501-1:2009	Fire behaviour
RF1	6.3/ 6q.3	A1 A2-s1,d0	No contribution to fire / virtually not flammable
RF2 RF2 (cr) «Critical»	5 (200°C).3 / 5.3 / 5 (200°C).2 / 5.2 / Critical behaviour 5(200°C).1 / 5.1	A2-s1,d1 - C-s2,d1	Little contribution to fire
RF3 RF3 (cr) «Critical»	4.3 / 4.2 Critical behaviour 4.1	D-s1,d0 - D-s2,d1	Acceptable contribution to fire
RF 4	3.3 3.2 Critical behaviour 3.1	-	Unacceptable contribution to fire
Not a building material	2.3 / 2.2 / 2.1 / 1.3 / 1.2/ 1.1	F	Not a building material

Critical Behaviour	Smoke emission according to VKF fire index	Fire behaviour
s1	3	Little to no smoke emission
s2	2	Limited smoke emission
s3	1	Unlimited smoke emission
d0	-	No burning droplets or particles falling off
d1	-	Limited burning droplets or particles falling off
d2	-	A lot of burning droplets or particles falling off

## **5 Contact Information**

Feel free to contact <a href="mailto:brandschutz@su.uzh.ch">brandschutz@su.uzh.ch</a> for any questions about fire prevention at events, especially for questions about the choice of materials.

For general questions about fire prevention contact:

University of Zurich Safety, Security and Environment Winterthurerstrasse 190 8057 Zürich www.su.uzh.ch

#### Cem Yildiz

Fire Safety Officer +41 44 635 55 00 cem.yildiz@uzh.ch