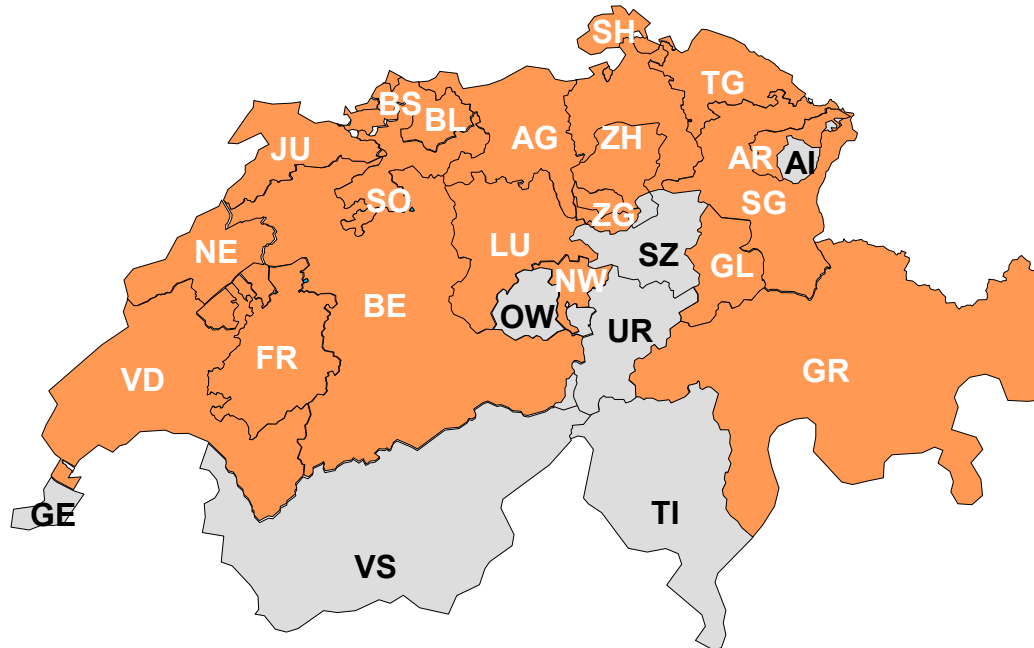




Public insurance companies for buildings in Switzerland

Olivier Lateltin

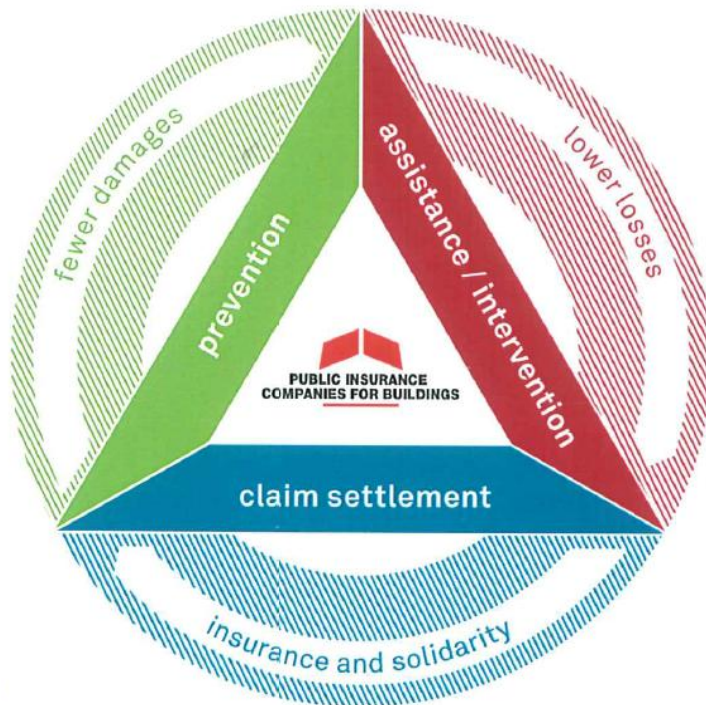
***former Director of the Prevention Foundation PICB
new Director of the Swiss Geological Survey, swisstopo***

Coexistence of statutory insurance and compulsory insurance



	Insured capital	Cantons
 Public insurance company for buildings (PBI)	85 %	19
 Private insurance company for buildings (PA)	15 %	7

PICB-System: „Insure and prevent“



Prevention - preparedness

- Prevention of fires and natural disasters as sovereign preventing obligation (Fire-brigade)

Intervention – limiting extent of damage

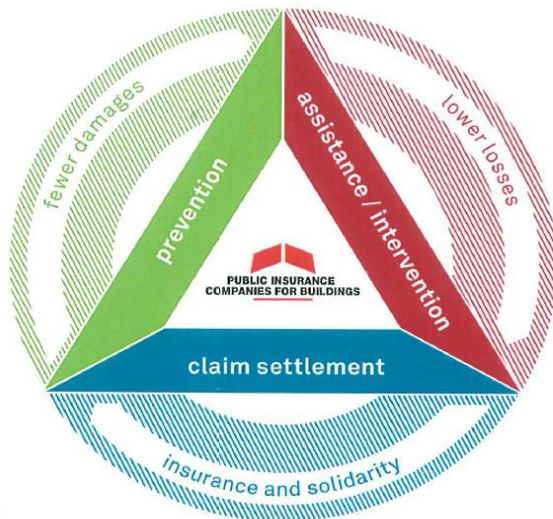
- Response and intervention als citizen obligation in case of fires and natural disasters-brigade (Fire-brigade)

Insurance

- Uniform, mandatory, complete and solidary insurance as national precaution for surviving

PICB-System: „Insure and prevent“

Facts and Figures 2010



Insured buildings 2,17 million

Insured capital CHF 2011 billion

Net premium income CHF 992 million

Fire loss CHF 266 million

Elementary loss CHF 429 million

Prevention CHF 285 million

Premium rate 0.50 ‰

A success story: „Fire protection“



Building codes

- 1 norme
- 18 directives

Technical notes

- 14 explanations

A success story: „Fire protection“

Register of building materials and fire resistance



building materials: 3091 products

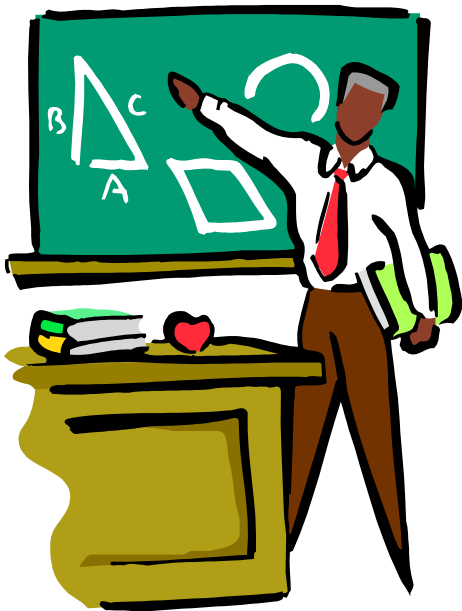
Technical furniture systems 2086 products

Sprinklers 603 products

- **1400 certificates per year**

A success story: „Fire protection“

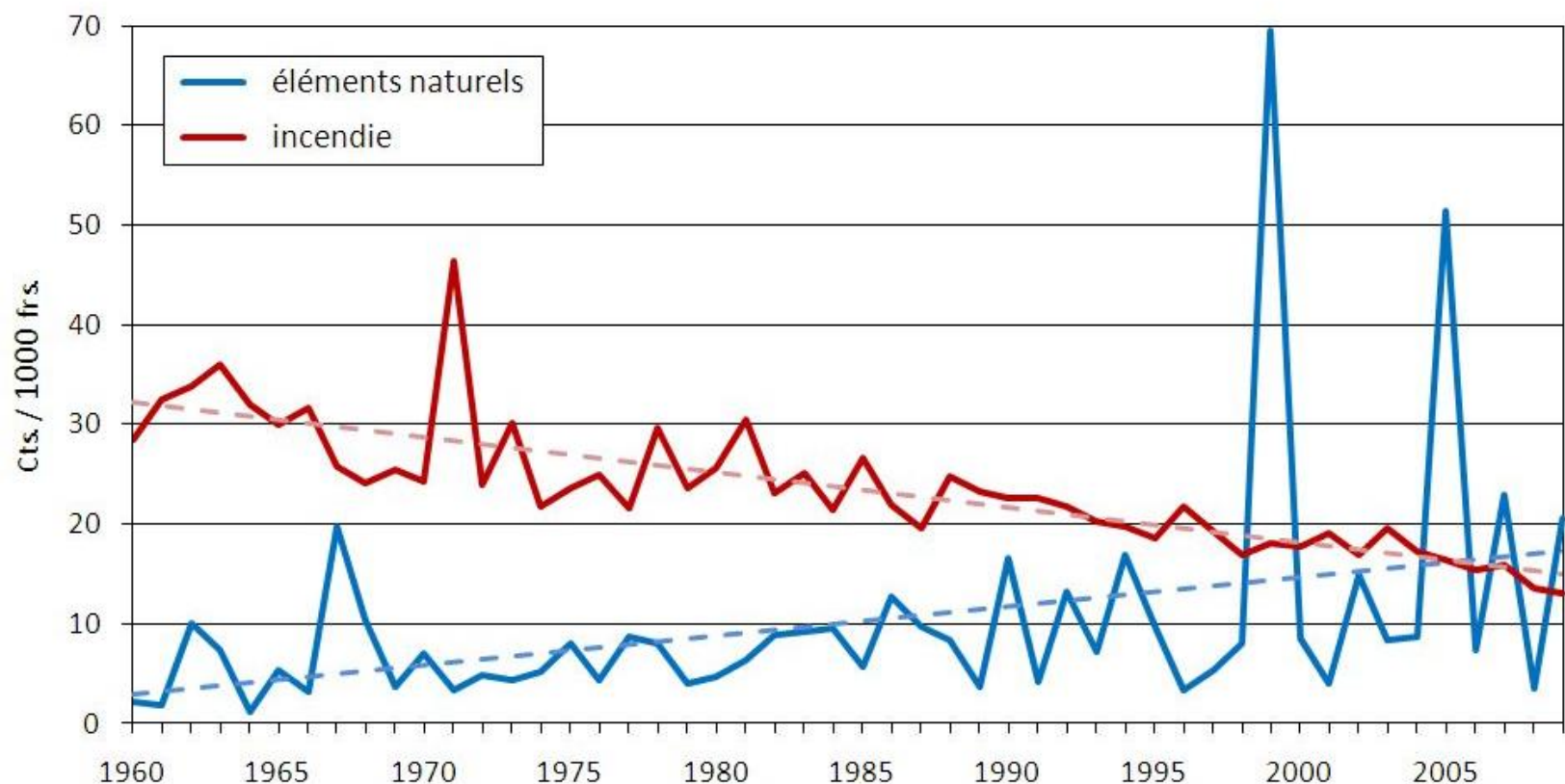
Formation and training of experts in fire protection



- at cantonal level
- at communal level

A success story: high reduction of fire losses to buildings!

Losses to buildings caused by natural hazards and fire in the 19 Cantonal Public Insurance for Buildings in centimes pro 1'000 insured swiss francs



Natural hazards covered by insurance

Floods



Erosion



Debris flows



Landslides



Rockfalls



Snow avalanches



Natural hazards covered by insurance

Storm



Hail



Heavy rains



Snow load



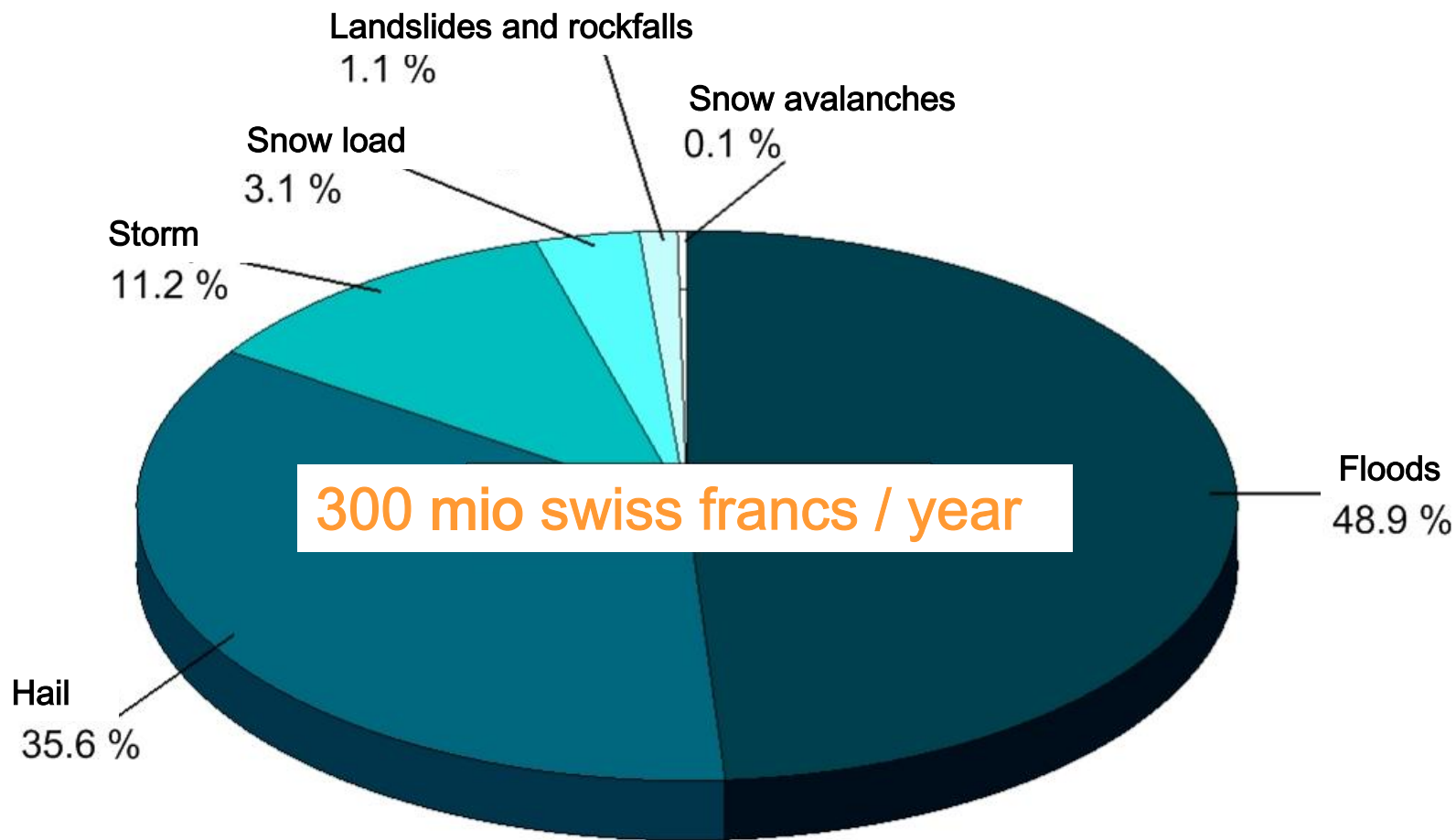
Thunder



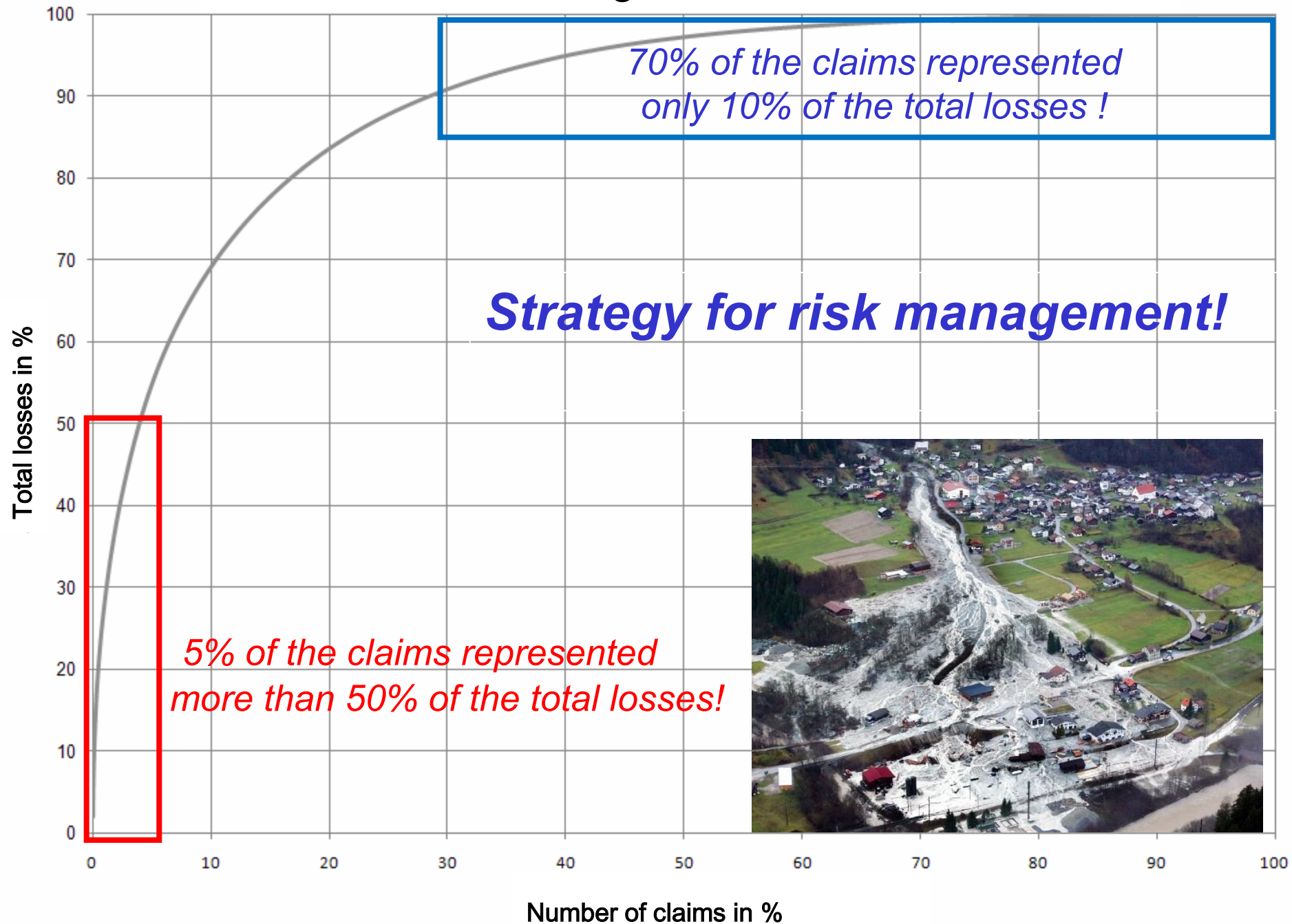
Earthquakes are not covered by insurance



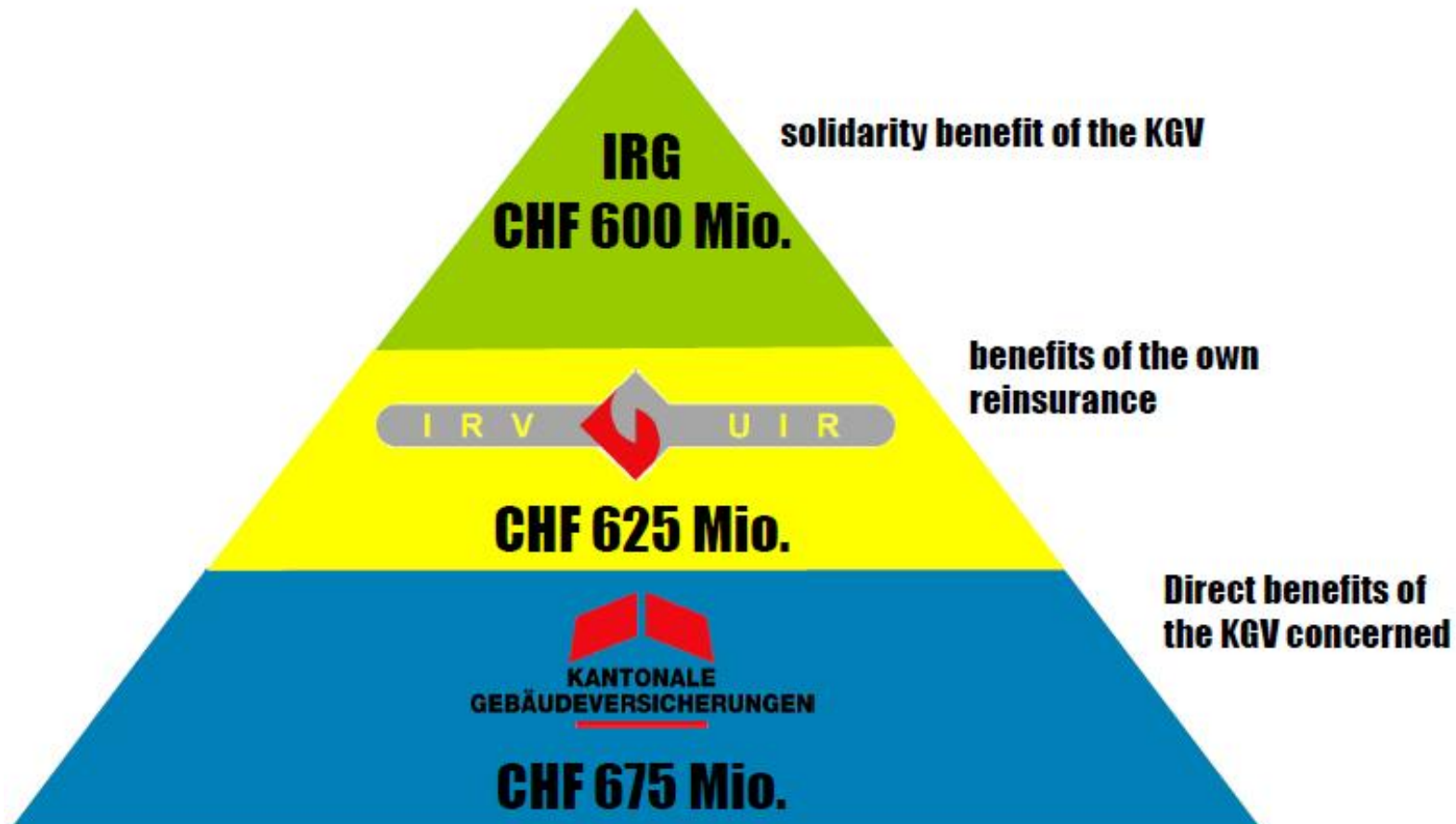
Losses to buildings caused by natural hazards in the 19 Cantonal Public Insurance Companies for Buildings 2000-2009



Floods 18 - 26 of August 2005 in Switzerland



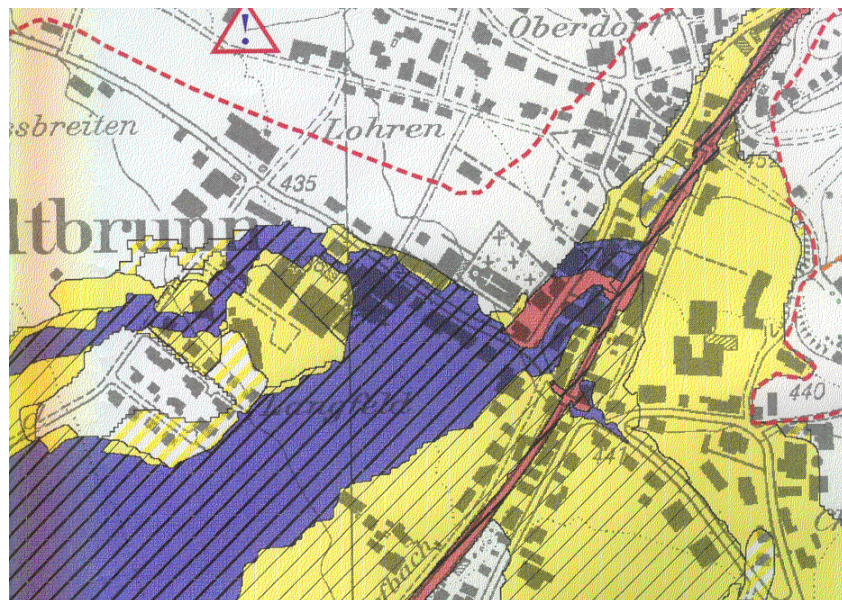
Solidarity system of public insurers damages 1999/2005: CHF 1'900 Millions



What about prevention ?



Land-use planning



Land-use planning
Hazard maps



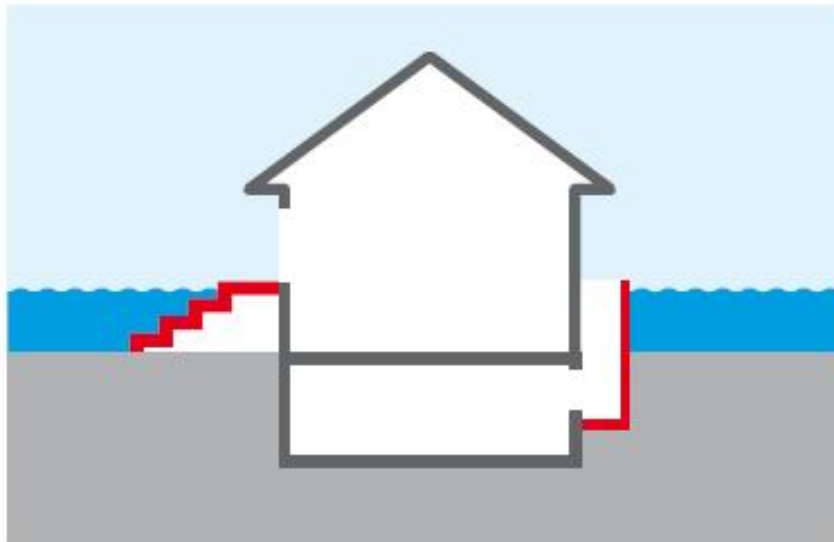
Urban planning
Construction permit

Public insurance companies for building PIBC

Hazard maps: financial contribution

Construction permit: Consultation and recommendation

Protective measures



State of the art/building codes

Protective measures

Insurance

owner responsibility

Public insurance companies for buildings PIBC

New buildings: construction permit – estimation and exclusions

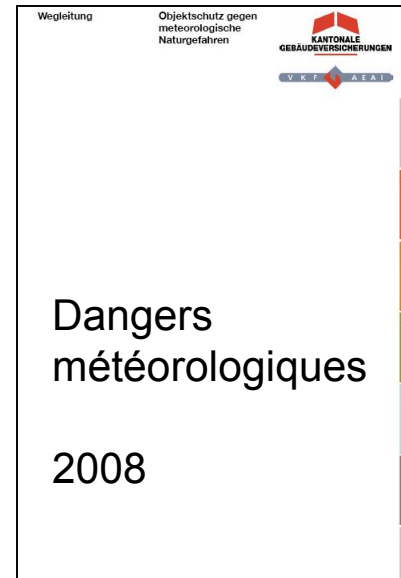
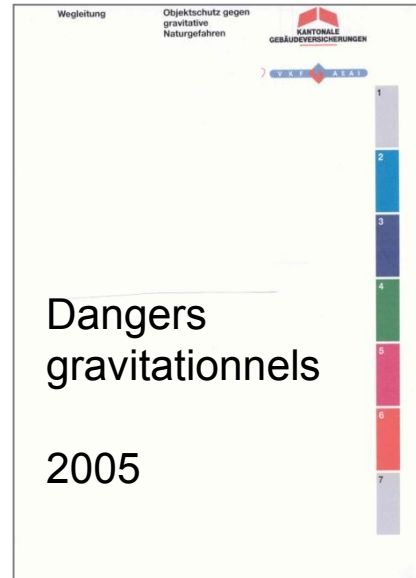
Existing buildings: estimation – prescription – exclusions

Protective measures

**State of the art
building codes**

**Protective measures
Recommandations PIBC**

**Flyers for
owners**

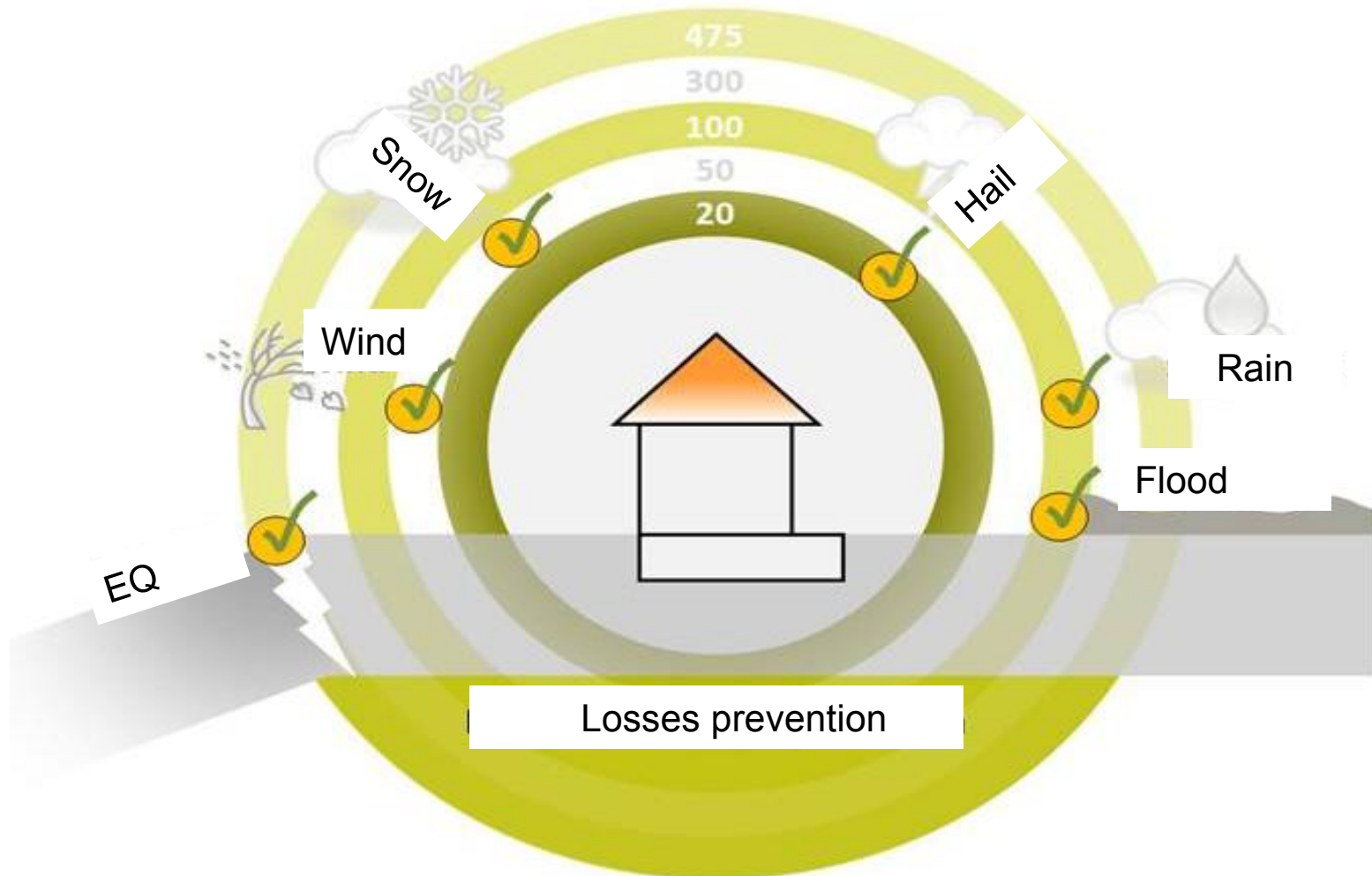


Public insurance companies for buildings PIBC

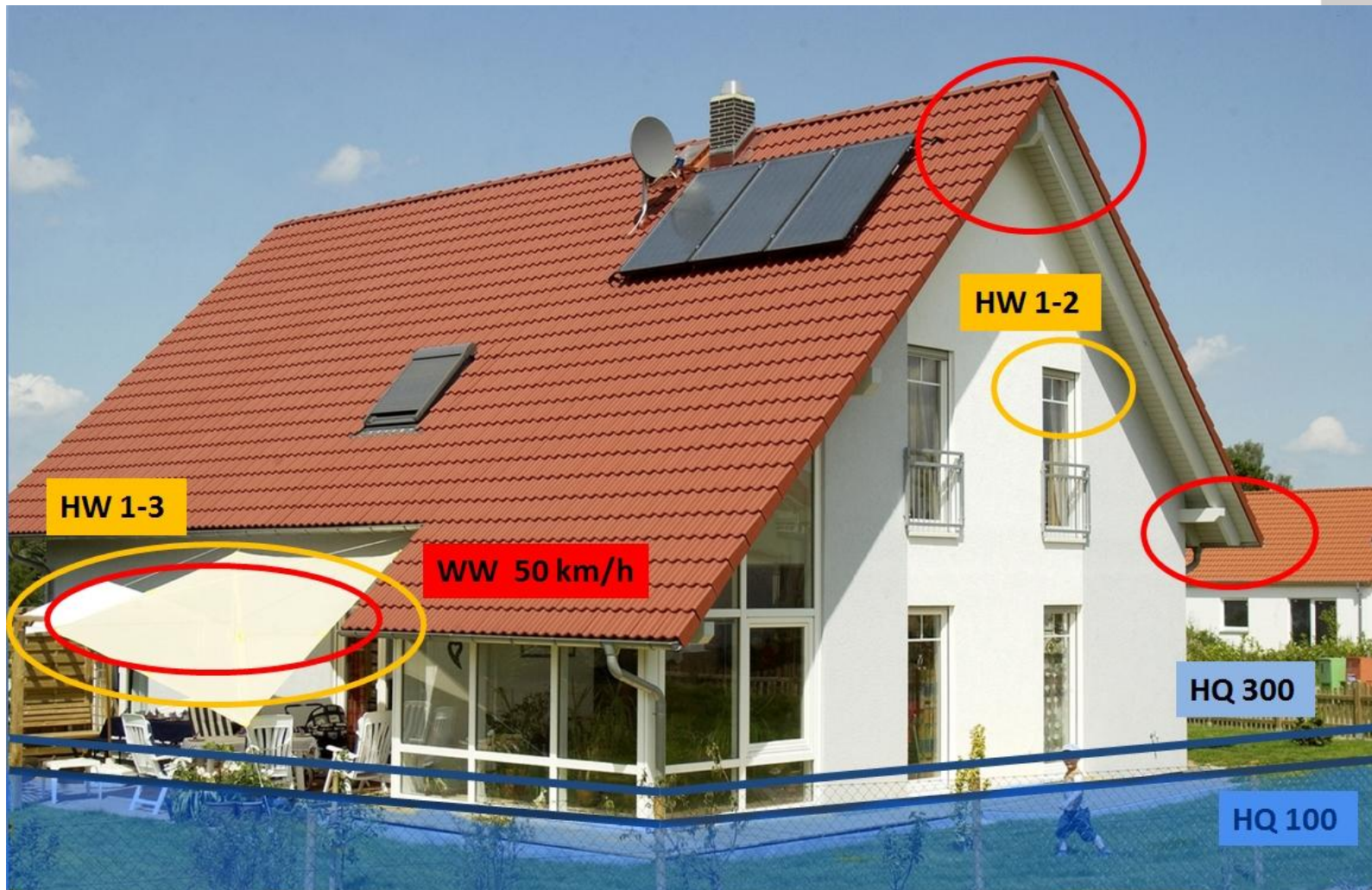
Recommandations: natural hazards

Training: architects, engineers

Actual safety targets according to building codes

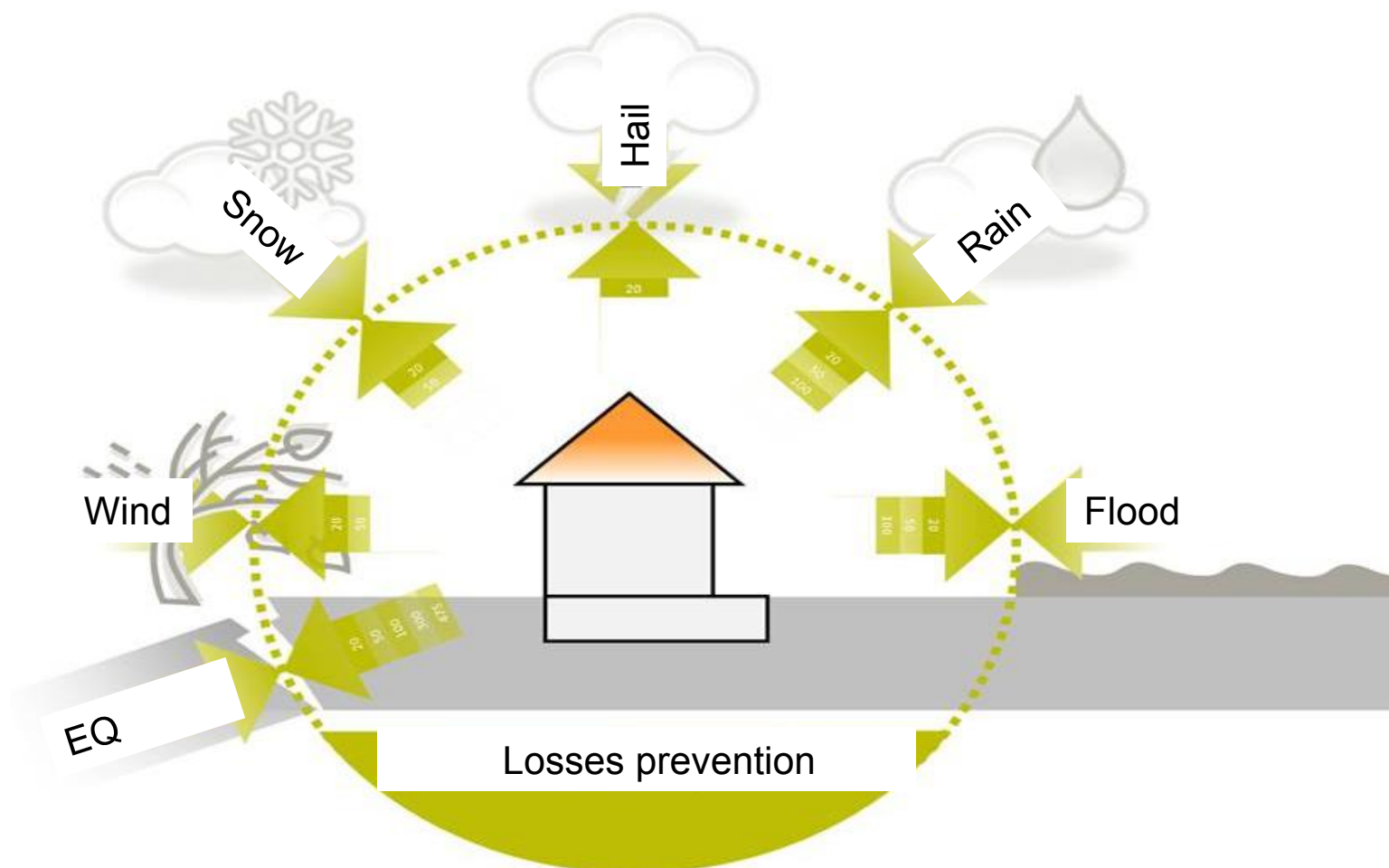


Vulnerability of the building envelope



Future safety targets for buildings

Les nouvelles constructions (y compris l'enveloppe du bâtiment) et celles qui font l'objet de transformations importantes doivent être dimensionnées en principe de manière à pouvoir supporter sans dommage les effets des dangers naturels d'une période de récurrence minimale de 50 ans. Pour certains événements et selon le genre d'affectation, les exigences sont plus sévères.



Hail - Register of protection

Vous trouverez ici des matériaux résistants



www.hagelregister.ch



Le Répertoire suisse de la protection contre la grêle sur Internet

Résultat de la recherche

8 homologations correspondent aux critères de recherche indiqués.
Les résultats 1 à 8 sont affichés.

 nouvelle recherche

01

0 RPG - Grêle (en préparation)

Désignation	Description	Classement	Requérant	no HPI	Validité
13 Toiture - Panneaux en matière synthétique					
PMMA S4P 32 sz Plexiglas Resist	Panneaux à âme quadruple en Plexiglas Resist S4P 32 (PMMA) résilients; Aspect: incolore; Dimensions [mm]: 1200*1000; Epaisseur [mm]: 32; Masse volumique [g/cm3]: 1.19	3	Röhm (Schweiz) GmbH Ruchstuckstrasse 8 CH-8306 Brüttisellen	18444	2011

14 Toiture - Coupoles d'éclairage

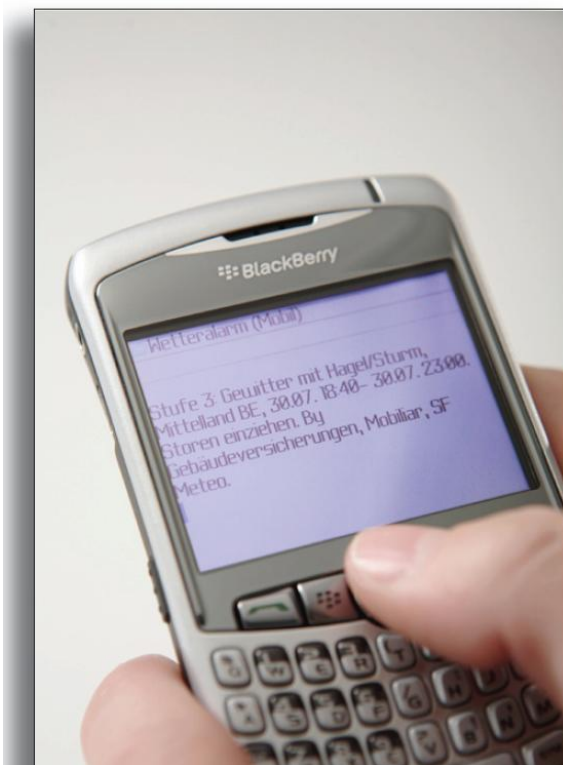
PMMA (in.) / PC (aus.) Typ 2s 076076 po	Coupole à deux couches; Aspect: transparent; Couche int.: PMMA, épaisseur [mm]: 2.0; Couche ext.: PC, épaisseur [mm]: 3.0; Dimensions [mm]: 760*760	3	Cupolux AG Allmendstrasse 5 CH-8027 Zürich 2	18439	2011
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17 Toiture - Vitrages

Drahtglas Verre armé	Composition selon indications du fabricant; Apparence du chant: brut; Dimensions [mm]: 1000*800; Epaisseur [mm]: 7.0; Masse volumique [g/cm3]: 2.5	3	Glas Trösch AG Industriestrasse 29 CH-4922 Bützberg	18450	2011
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Relevez les stores !

Alarme-Météo vous prévient à temps



Faites-vous alerter par SMS lorsque des intempéries menacent. Vous pourrez alors relever vos stores à temps et prendre d'autres mesures. Ainsi, vous éviterez que la grêle n'endommage votre bâtiment. Alarme-Météo gratuite fournie par les Etablissements cantonaux d'assurance des bâtiments, SF Meteo et la Mobilière Suisse: www.wetteralarm.ch

Abonnez-vous à l'Alarme-Météo gratuite par SMS: START AM (NPA) au numéro 4666. Exemple pour la ville de St-Gall: START AM 9000



DEAL WITH THE CHALLENGES THAT YOU FACE!

Reducing natural hazards with integrated, building-specific risk management

This is the goal of the nineteen Public Building Insurance Companies. They organise and promote natural hazard protection and intervention, guaranteeing good value natural hazard insurance for all buildings. Strategic projects in this wideranging operational field are defined, put out to public tender, coordinated and financed by the

**Prevention Foundation of the
Public Building Insurance Companies**

Register for hail impact resistant building materials

This register classifies the construction products for building envelopes as regards their hail resistance. As such, it is an aid to new building and renovation project planners. The register – at www.hagelregister.ch – provides an overview of the hail resistance levels of materials normally used in building envelopes. The scientific bases for the register, which is in its initial implementation stage, were developed by the Foundation in the course of a variety of projects.



Vulnerability of buildings to flooding

There is more flooding to come – that much is certain. The federal government requires of the cantons that they complete detailed mapping of natural hazards by 2011. Householders now need new tools to calculate the vulnerability of their houses to flooding in view of the known threat, and proactively to choose decision-making guidance on future protective measures. The project team is developing a software package that contributes to reducing flood damage through property protection measures



You will find information on the projects at www.praeventionsstiftung.ch.

Earthquakes and masonry

This project was based on the assumption that the vulnerability and displacement criteria used for Switzerland's stock of masonry buildings tended to overestimate the damage potential of earthquakes in the country. This hypothesis was confirmed: the resultant new vulnerability and displacement criteria allowed the damage potential to be reassessed, and so have had a corresponding effect on both the state of technology and reinsurance premiums.



CAS – Protecting buildings against natural hazards

With the aim of guaranteeing that buildings are protected against gravitational and meteorological natural hazards, the CAS (Certificate of Advanced Studies) in «Protecting Buildings against Natural Hazards» communicates information through seminars, self-study and real examples. The courses from the universities of applied sciences in Burgdorf, Lucerne and Fribourg are aimed at architects, engineers and planners.

Formation dans le domaine de la protection des bâtiments



Haute école spécialisée

MAS risk engineering

CAS sécurité parasismique

CAS protection incendie

CAS protection des bâtiments contre les dangers naturels

Formation professionnelle supérieure

Expert en protection incendie DF

**Spécialiste en
protection des
bâtiments contre les
dangers naturels**

**Spécialiste en
protection incendie
BF**

Certificat AEAI

Applicateur de peintures intumescentes

**Spécialiste en
installations
d'extinction à eau**

**Spécialiste en
installations de
détection d'incendie**

**Chargé de sécurité
protection incendie
AEAI**

**Spécialiste en
protection extérieure
contre la foudre**

Formation professionnelle initiale

Formation continue à des fins professionnelles dans le domaine de la protection des bâtiments



Cornel
Quinto

Insurance Systems in Times of Climate Change

Insurance of buildings against
natural hazards

 Springer

Schulthess 