



CONFIDENCE THROUGH SAFETY AND SECURITY



Your New Home

Safe and secure from the start

Your New Home

Safe and secure from the start



We wish to thank the Police, in particular the "Kommission Polizeiliche Kriminalprävention der Länder und des Bundes - KPK" (German Police committee for crime prevention) for the good and constructive cooperation in producing this brochure.



VdS Schadenverhütung GmbH
Security
Amsterdamer Straße 174
D-50735 Köln (Cologne), Germany
Phone: +49 221 7766 - 173
Fax: +49 221 7766 - 377
E-mail: security@vds.de
Internet: www.vds.de

Copyright 2008 VdS Schadenverhütung GmbH

■ Safe and secure from the start

To build up the own home – unless if house or property – is the biggest challenge which most of the people are facing up. Several specialists are available for the planning.

But to receive really what we desire, it is necessary to take several basic decisions. Will it be large or small? Shall it be modern or native? Which equipment is desired? All these questions of course are discussed with the architect.

But often the item safety & security is neglected. We all wish to feel well and secure in our home later. What is more expedient as to consider this already when planning our new home?

With a relatively small effort you may reach a lot if you do far-seeing plan and do have an eye on the protection of you, your family and your property.

Subsequent improvements are possible, but of course in practical always much more expensive and such retrofit products often are not easily to be bound into the ensemble. Due to these arguments it is the best to include in the planning directly the design of security products.

With a proportion of around 3 % of the total construction sum a good security concept may be reached.



■ Risks

Besides damages which are caused by natural hazards (e. g. storm) and the fire risk the risk of intrusion is to be considered. The police elaborate studies on how intruders are working. These studies always show that the intruders prefer (and always are successful) to break windows or French windows. But intruders neither do stop at entry doors, cellar doors etc. With this in mind the planner always considers the house such secure as the access which is the easiest to be overcome. By the way: a window that is tilted has the same value for the intruder as a completely open window. You should therefore close and lock all windows when leaving your home and tightly lock all access doors accurately (turn the key two times).

■ Security techniques – what does this mean?



Many people are thinking of good visible accesses to houses and a brightly illuminated entry area when talking of security. This is right, light gives a secure feeling – independently of the reduced risk of accident during winter time.

A good illumination also may chase off darksome people, in effect a real detaining of engaged intruders is not given by such illumination. Here special techniques are required.

Security starts in homes at exterior walls, doors and windows. Best possible protection for doors and windows may be reached by the installation of approved burglar-resistant products. Doors and windows which are approved by VdS Schadenverhütung are put through their paces by a testing of the whole assembly. VdS-approved products combine requirements on stability, aesthetics and functionality.

If due to high values or due to a high exigency for security, physical security devices are not deemed to be sufficient, the protection may be rounded up by the installation of an intruder alarm system – colloquially called alarm system.

■ Walls

An exterior wall has to be stable, i. e. for example that it shall not be easy to penetrate the wall. Furthermore walls shall be constructed such that stable windows and doors may be mounted so that they in effect do not break out of the wall in case of an intrusion attempt. Stonewalled house walls or especially tested wall constructions or such on base of concrete construction should be first choice. But also walls of wooden material can offer a stable construction – provided the stability against intruders is an identified aim described in the design planning (the requirements that an owner presents to the architect).

■ Roof

The roof itself shall not invite intruders even if on first sight the risk seems to be low. Climbing aids as e. g. frames for twines or similar should therefore be avoided.

As roof covers – of bricks, reed or other material – in general are easily to be removed, the access to living quarters should be protected by a lock or bolt which is easily to handle.

If lofts are tenant and not partitioned the physical protection of roof windows is – as for all windows – very important, if these are easy reachable.

■ House access doors and posterns

Under the aspect of security against intrusion the house access doors and posterns are in principle to be evaluated the same way. A planner whose eyes are not drawn to this fact probably will consider the house access door much more as any posterns. His argument that the house door serves as identity, of course has its qualification.

However, the fact that an intruder does not choose the most beautiful door but the door that enables him best to get into the house shall not be ignored. He may break the house access door but just as well as choose a postern that more often is not secured the same way and this way is much more weaken. The access at back sides of houses normally is not visible for passers-by, so the perpetrator has more privacy to work. All this is well known in criminal circles.

So, besides the aesthetical requirements the protection against intrusion of "hidden" doors shall not be ignored.

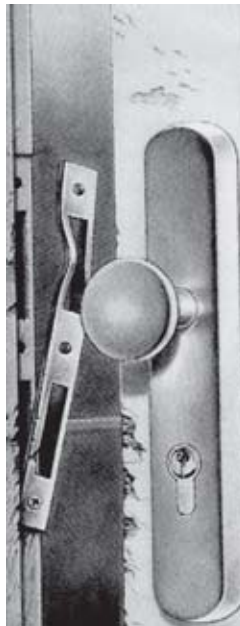
The main access door (with stable door leaf and frame) shall be equipped with a lock with stirrup. Furthermore the installation of a wide angle spy hole is expedient. The spy hole and the stirrup give the possibility to check of what is going on outside – e. g. an unbidden guest – before opening the door completely.

The purchase of a door communication (intercom) system which is combined with a video camera – you may not only hear but also see the guest – may be intended.

Burglary-resistant access doors at least should fulfil the lowest class (class N) of approval.

Note: VdS Schadenverhütung issues for burglar-resistant doors and windows approvals for classes N, A, B and C.

■ Door locks



If no approved doors are to be installed at least the lock of the door should be considered in detail. Besides a stable door leaf the whole area around the door knob is interesting for an intruder.

The planner shall evaluate besides the striking plate (simple designs break off the wall often within seconds) also the mortise lock, profile cylinder and the door hinges and – if given – retrofit these. All security measures shall be tuned to each other.

If the door consists of a glass front or other so-called infillings, these also should be strengthened.

■ Terrace doors (French doors) and windows

Terrace and balcony doors offer a wide view to the outside. They accept light to come into the room and may be tilted or opened widely for airing. Unfortunately intruders often take advantage of the constructional weakness – the opening and locking functions quite often are too weakly constructed – of the doors.

French doors in principle are the same as big windows reaching the floor and many windows can be opened with simplest tools in a time of less than a minute. This drastic indication is valid for standard windows, which are in principle locked with normal roll pins.



Of course there are solutions: Windows may be constructed (similar to doors) such that an intruder does not really have a chance to break them. We are talking here of burglary-resistant windows. They should at least fulfil the requirements of the lowest class N.

Also installed windows may be equipped with retrofit products that are tested through their paces. These locks in most cases are visible and often are to be operated individually.

If you wish to render secure your windows, additionally the normal insulation glass may be substituted by a special glazing. A burglary-resistant glazing fulfils also the regulation on heat insulation but hinders simultaneously an intruder to break the window.

■ Additional security

If you intend to deposit important documents or jewellery at home, you should think about the purchase of a safe.

Safes also are tested to the core and approved by experts of VdS Schadenverhütung in their own laboratories. Our experts have a wide range of experience and make familiar before testing with the weak points of the product, this way guaranteeing a real worst-case-test.



You should contact your insurer to discuss which security grade (also called approval class) is suitable for your case.

■ Alarm systems

The installation of an alarm system (experts are speaking of intruder alarm systems or hazard warning systems) should be considered when planning your private home. However, first of all the physical security measures are to be fulfilled appropriately as well as the protection against fire resp. smoke.

The items intrusion and fire being covered the protection of the inhabitants may be rounded up with an alarm or hazard warning system which is tuned to the special requirements of the one-family-house. A hazard warning system is able – as the name states – also to detect other hazards besides intrusion, as e. g. smoke, water ingress in the cellar, leaky gas pipes or other information like technical faults in air ventilation or a heating system and sanitary installations. What is the best for your intentions should be clarified with an expert company which may plan your object individually.

A reliable alarm system may be very complex. The functions of the system, however, are described in a few words: The system may detect an intruder when coming into the house, if he breaks a window or a door or breaks the glazing of a window.

This detection either leads to a local alarm (sirens, warning device, engaging lights) or to a so-called remote alarm. In the case of a remote alarm the signal/message is transmitted directly (e. g. by phone) to a security company. This company is to give assistance fast or may call for help.

■ Fire protection

Now the fire protection of your home is to be discussed as the intrusion protection is finalised.

The protection against fire and smoke (the smoke represents the actual danger for your family!) often is underestimated. But here also is valid: Already simple measures may lead to a high protection.

So-called home smoke alarm device (detectors for the own home) detect in a secure and reliable manner smoke before it grows to a threat for life. The detector warns with a loud and penetrating sound. If you are sleeping you will be wakened up. So you have a timely advantage that may give you the chance to save yourself and your family.

Smoke of fire is extremely toxic and the danger is to suffocate on this smoke when a fire breaks out in your home or apartment. Smoke detectors protect you and your family exactly against this risk.

The detectors should at least be installed in that room through which the sleeping room is accessible as well as in the nursery.

The use of such detectors is also expedient for the living rooms.

Besides very low priced stand-alone detectors there are products that can be linked together. The detectors here “inform” each other over a wired or wire-free connection of the danger so that inhabitants are warned from all detectors in case of a danger. Rooms with a high risk of fire additionally shall be equipped with a portable fire extinguisher (e. g. foam extinguisher) and a fire blanket should be available. Different county regulations (normally available through the internet) already determined an obligation on the installation of such smoke detectors.



■ Installation of security techniques

Consultation, planning and installation require a high level of expert know-how. Already at planning stage the installation of security techniques should be discussed with the architect. Together with the architect you should find out what security needs you have, what tangible risks can be anticipated and what security services are desired. In short: You determine what is to be considered for your house. In this respect you may also contact the police, who offer security advisement in different big cities. Ask your next police department for an advice.



Your insurer or the German initiative “Nicht-bei-mir” (see under www.nicht-bei-mir.de) will support you on request in any questions concerning safety & security (in German language).

Important item is to communicate your security needs to the architect. For this purpose the present brochure may help you together with other documentation.

The detailed planning as well as the following installation of security measures should be performed only by especially trained experts. Here the so-called expert installers are meant. These installers are checked by VdS Schadenverhütung and receive a certificate. The know-how of the VdS-approved installer is checked regularly.



These regular controls give you as customer the assurance, that the installer company is able to provide the services that he is promising. Of course, the installer has to document his work in detail, which is done on base of the VdS certificates of conformity. The installer describes his work on this attestation in detail and you as customer of the installer are on the safe side. Maintenance and repair – especially important for alarm systems – are documented in the log book which is annexed to the system.

■ Protection against tap water damages

The requirements on modern heating and sanitary systems are steadily growing. The risk to suffer a damage of tap water in the own house therefore should be treated very seriously. The repair of such a damage, often caused by small leaky spots in the tap water pipeline often is linked with great efforts, dirtiness and discomfort.

Already with the aid of simple measures the probability of a tap water damage may be reduced or at least the dimensions of the damage may be diminished.

Keep in mind to have a filter mounted at the connection of drinking water (mostly behind the water meter). This filter will prevent that dirt particles reach the house installation. Such particles often are cause of damages of pipelines.

Shut-off devices (e. g. turning valves) shall be unambiguously marked, always accessible and known to each of the inhabitants. If the shut-off device is installed e. g. in the locked cellar it may not be reachable in case of damage and therefore may be useless.

Already the choice of the suitable installation and piping material is of basic importance for durable functioning of the installation. Not every material is suitable for every kind of drinking water.

The composition of the drinking water may – in contrary to the general thinking – vary immensely in different supply areas, as e. g. regarding the concentration of salt (so-called water hardness). It is useful before installation to receive an advice of the local water supplier and to discuss the possible applications as well as advantages and disadvantages of pipe materials and systems.



■ Overvoltage protection

A German proverb says: Avoid oaks, search beech trees. The planting of trees unfortunately is not the right solution for a protection against lightning and overvoltage at and in your house. Here technical solutions are to be found, which give you the required security when the weather outside is stormy and sparkling.

■ External lightning protection



External lightning protection assures that in case of an impaction the lightning current is bleed off to the ground without danger thus impeding fire damage. The installation of an external lightning protection system (so-called lightning rod) should be performed by experts if possible already at construction of the building.

■ Internal lightning protection

When lightning impacts into the house not only equipment and facilities are jeopardised. The electrician expert speaks of overvoltage damage if equipment is damaged due to lightning impact in the surrounding or due to certain switching procedures in the mains supply. The effects may vary a lot: harmless effects as e. g. video recorder not working or defrosting chest freezer. The damage cannot be overseen – when inhabitants are absent – when the heating is no more working (in winter the water pipelines risk to freeze and burst). Also your PC including all data filed may be destroyed by an overvoltage.

Installation of an internal lightning protection system helps to impede such overvoltage damages.

■ Comprehensive lightning protection

In order to be well secured a combination of external and internal lightning protection – as to say installation of a lightning rod together with equipment with overvoltage protection and equipotential bonding – is recommended. Planning and installation of these protection measures leave to the expert's know-how. You will find such experts being VdS approved in the internet under www.vds.de.

■ Natural hazards

Speak with your insurer and discuss with him together against which natural hazards (storm, hail etc.) you should protect (and insure) your home. More than ever this may be necessary as regarding the increasing storm events in the last years (also heavy rain, floodwater and hail are often registered). Do not hesitate to collect opinions of several insurers. As a minimum measure e. g. the installation of back pressure valves in water pipelines is strongly recommended in valley layers.

■ Further information

For the realisation of your security concept besides your architect, the police and the VdS-approved installer also the initiative "Nicht-bei-mir" will be of help. Please see under www.nicht-bei-mir.de (in German language) various information around the protection of home, yard and inhabitants.

■ References

All VdS-approved products are listed. These lists are either available at our publishing department or as download under www.vds.de for everybody. You may convince yourself if a product has been tested successfully and in which class a VdS-approval has been issued.



■ VdS publications

A variety of the items referred to in this brochure is described in special technical guidelines but also in security guidelines that are written in more general wording.

The security around your house is discussed among others in the following documentation which is published by VdS Schadenverhütung:

Brochures

Doors, **VdS 5479**

Windows, **VdS 5478**

Profile cylinder, **VdS 5467**

Safes and strongrooms, **VdS 5483**

Intruder alarm systems, **VdS 5480**

As well as

Security guidelines for households, **VdS 691**

All documentation is available at VdS publishing house and as download from the VdS homepage.

For further questions please contact security@vds.de.



Please also visit our homepage www.vds.de.

