

## PositionPaper

### Our view on Safety

Many forms of safety (not to be confused with security!) exist and all of them need to be taken into account in order to ensure the best possible overall safety. That is why Van Welleman Villas® defined no less than eight different forms of safety, enabling us to measure and quantify the degree of safety. As such, we are able to enforce progress and continuous growth in excellence.

#### **Electrical safety**

Electrical safety refers to the overall amount of measures that have been taken to avoid electrocution of persons, avoid damage to devices caused by power disturbances and/or polluted power provisioning, and finally, avoid fire caused by sparks or excessive heat generation.



#### **Protection against Radiation**

Radiation safety refers to the limitation of RF (i.e. radio frequency), microwaves (e.g. the microwave oven, mobile phone) but also radioactive radiation (e.g. most smoke detectors contain radioactive elements). Especially microwaves are to be avoided due to the fact that they interact at molecular level (e.g. the heating of all water-based materials ... such as the human body, brains etc.). Since long-term impacts are unknown, it is better to prevent than to cure.



#### **Chemical safety**

Chemical safety refers to the avoidance of using products containing potentially hazardous, toxic, or allergic products.



#### **Physical safety**

Physical safety refers to the use of products and/or solutions that avoid injuries (e.g. burrs, sharp edges, slippery surfaces, etc.).



#### **Prevention and detection of Fire, Smoke and Gas**

This topic refers to the avoidance, detection and fighting of fire and gas. All detection and fighting systems have a redundant concept in order to ensure -as much as possible- a failsafe operation.



#### **Protection against Assault, Banditry and Aggression**

Assault is not to be confused with burglary. A burglar's primary goal is to avoid personal contact by all means and to get as much value-goods as possible in as little time as possible. As such, he will avoid drawing attention and will interrupt his action as soon as something or someone interferes. Assault is completely different in that it is not limited by the use of blind violence. Criminals can not be stopped with anti-burglary measures and therefore assault is defined as a separate safety object.



#### **Burglary and Access Control**

Burglary safety (i.e. security) refers to all measures taken to avoid and detect burglary. Van Welleman Villas® considers anything beyond burglary detection being a form of assault. The latter is done to ensure our customers safety, regardless of the type of intruder.



#### **Protection of Privacy, Personal Data and Home Automation**

Data safety refers to all possible measures to protect the residential data (i.e. personal data, audio, video, home automation) from the outside world. In fact, all vital systems (e.g. the industrial automation system) are completely separated from the Internet and use a unique and proprietary "analog" communication technique. Physical VLAN's are used for local storage and video surveillance for additional safety.



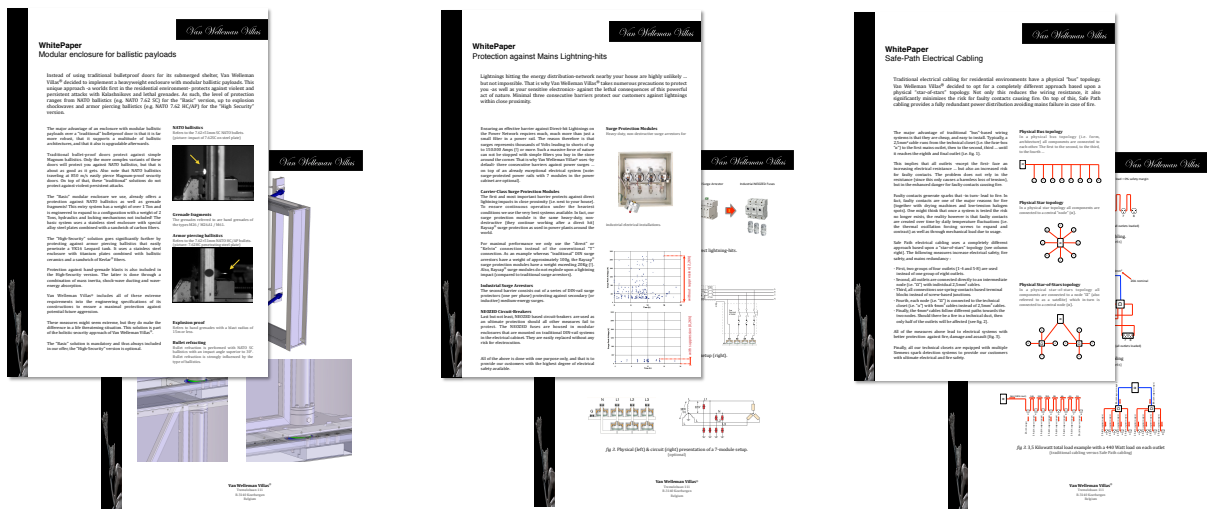


fig 1. Some of our safety-related White Papers.  
 (e.g. 3D-Modular Enclosure for Ballistic Payloads, Mains Lightning-Hit Protection, Safe Path Electrical Cabling)

**Safety related “Abstracts”** (i.e. “what is so special about Van Welleman Villas?”)

- "Protection against burglary and aggression"
- "Electrical safety"
- ...

**Safety related “White-Papers”** (i.e. “what is the technology behind it?”)

- "Safe-Path Electrical Wiring" (safe electrical cabling ready for the future)
- "Critical-Path Electrical Wiring" (secured power provisioning for power-hungry devices)
- "1-2-3 Simplicity Control" (three-button alarm activation everywhere in home)
- "Assault/Hacker-Proof Residential Automation" (protected against professional burglars)
- "Staged Differential Protection" (protected against failing residual current protection and automatic fuses)
- "Electric-spark Detection" (detecting a fire before it started)
- "Protection against Mains Lightning Hits" (preventing high-power electric surges from entering your home)
- "Cooker de-Activation" (combining professional gas cookers and )
- "Blast-Proof Shelter" (protected against serious crime and assault)
- "Panic Floor" (the safety of a panic-room with the liberty and comfort of a whole floor)
- "3-D Modular Enclosure for Ballistic Payloads" (ballistic protection with a future growth-path)
- "Integrated Safety (Pool, Kitchen, Ciné ...)" (a home is only safe ... when everything is safe)
- "Integrated Power Management" (comfortable energy efficiency)
- "Safe-Pool" (safe swimming for children, disabled and the elderly)
- "Security Server" (protecting your home against hackers, institutions and governments)
- "Redundant Technical Conducts" (power availability under the most extreme circumstances)
- ...

**Safety related “Case Studies”** (i.e. “what does this mean for me?”)

- “Help, my husband has a heart attack”
- "An accident in the swimming pool"
- “Help, there is a burglar in our home”
- ...