
TechnoKontrol™
WHERE YOUR SAFETY IS OUR PRIORITY
Civilian, Commercial, Industrial,
Bunkers, Panic Room
Protection Technologies

INDEX

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ZURICH®

TechnoKontrol is a member of the

NFPA® National Fire Protection Association
The authority on fire, electrical and building safety

TECHNOKONTROL HOME SECURITY ENGINEERING & SAFETY TECHNOLOGIES


Home/Office
Panic Rooms/Bunkers


CLEARANCE 10FT 5IN

Technokontrol Home Security Engineering & Safety Technologies

Technokontrol Security Home Engineering© offers hidden panic rooms, bunkers, floors, secret passages, safe houses for security and also for chambers to hide out during intense weather, civil un-rest, criminal attacks, theft, armed robberies, hostage taking, sabotage, terrorism, vandalism, climatic damages, warfare, etc.

The security and safety systems are engineered to seamlessly blend into the interior of a room, building, floor, bunker, so that they cannot be spotted by a visitor.

They contain hidden cavities with steel structural support members to keep the "protection space" and assets, along with our patented custom security and safety technologies, and numerous other technical innovations that have set us apart as the leader in this secret, highly qualified industry.

Most chambers, rooms, floors, bunkers include some kind of communication system that alerts authorities in case of an emergency, attack, civil unrest, but Technokontrol offers an "unique, key in hand, top quality, most advanced secu-

rity and safety system as possible", because one has to remember that there are many more dangers than just "human attackers" as storms, tornadoes, tsunamis, radiation fallout, electromagnetic-solar radiation, viruses, disease, etc.

Technokontrol Security Home Engineering© designs and creates the required measurements and photo designs of closets, bedrooms, storage rooms, panic rooms, bunkers, secret floors which they would like to convert into a secret area and the our company can construct the installation.

Technokontrol Security Home Engineering© can build secret passageways, rooms, bunkers, floors, emergency exists which can be installed, as they arrive already designed and prepared for installation so they can be made operational as soon as possible in a person's home, business, security bunker.

Technokontrol Security Home Engineering© systems are the most well-designed, well-built, long-lasting, materials, to build secret floors, bunkers, panic rooms, etc. That is why they can be found in ultra-luxury estates and royal palaces across the globe, corporations, VIP homes, etc. In fact, our secret rooms, bunkers, floors are so perfect that insurance companies offer our clients lower premiums. But not all secrets rooms are made with such attention to detail... and protection, these technologies and systems are for unique and specialist clients whom know that one thing one can´t buy and that is time! Tell Steve Jobs, how much would he have paid for an additional year or decade of his life or any other millionaire, politician, VIP, because safety and security at this level isn´t even a luxury but a necessity!

What You Need to Know About Security & Safety Doors, Rooms, Floors, Bunkers, etc.

In recent years several companies have sprung up offering lower-cost imitation secret doors, systems, so we feel it is important that our clients understand the difference. Though they may look great in small internet photos, a real-life inspection of such doors reveals a very different story.

A quality secret room, bunker MUST be a very precise machine that must maintain extremely tight tolerances. Many companies simply attach a hinge to a piece of carpentry, resulting in a secret door that sags, warps, rubs, and looks obvious, especially when a load is applied, or with time as humidity and temperature fluctuate or even that an "attacker" may just drill a hole through the wall and enters the room, "protective area", from a different angle, direction or even floor, ceiling, basement, neighbors, home/garage room, etc.

Security & safety isn´t a luxury but a necessity in today´s ever increasing unsecure world where one mistake, one incorrect decision can change one's life time work and endeavors.

Technokontrol Security Home Engineering© products are precisely engineered to handle these conditions while maintaining those essential tight tolerances.

They contain hidden cavities with steel structural support members to keep the door strong, walls, panels, security systems operational and secure, along with our patented custom panels, doors, security materials, and numerous other technical innovations that have set us apart as the leader in the security & safety industry.

Technokontrol Security Home Engineering© have worked and shared side by side with top global security experts to design specialist panic, bunkers, secret rooms, floors with the combination of our own unique security technologies as we know that if any technology can be created to "stop" someone or something entering a "protective space" there will be always someone who will be able to "open" that "protective space".

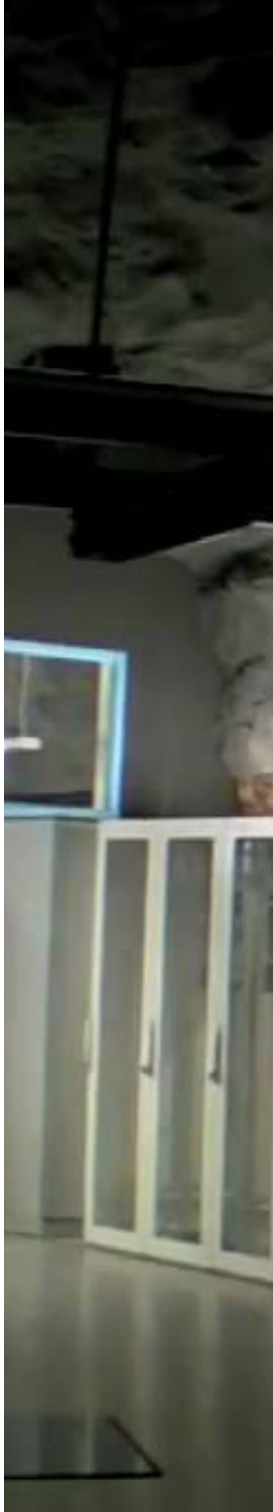
Thus "time is of the essence" and the need is for mid-long term protection until the authorities can reach the "protected building" but also their could be a hostage possibility thus needing other much more advanced "Security & Safety Technologies" to be included, designed and incorporated, such as anti-thermal heat/fire panels, doors, ceilings, cabling, air vents which can resist more than 240 minutes 1600-2000ºC blow torch heat directed to a door, panel, vent or even a hidden wall.

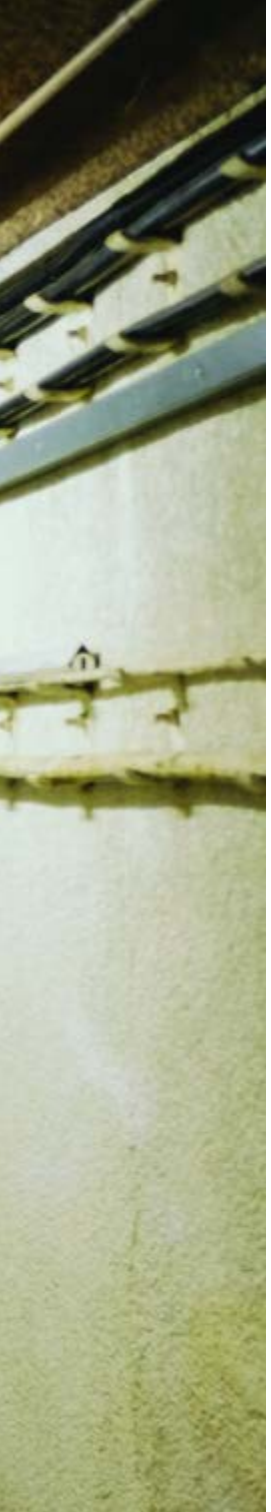
With other more advanced security materials used for example in our patented panels, walls materials, these panels can block out full thermal/heat/infra-red search equipment, electronic blocking systems as anti-blocking external telecommunication lines, waves which will protect the owner against these types

of "electronic attacks" and also inform incorrectly to the "attacker" that there isn´t anyone to be searched for inside the home, office as the owners "heat source-human radiation" will be nullified against any top level electronic surveillance search technologies as "heat seeking technologies".

Thus the owner, client being behind a protective wall or inside a hidden room with our safety & security technologies, thus protecting the owner in case of a "hostage plan" or theft as believing that the alarm may not have been activated and thus increasing the possibility or their arrest or making shorter their attack plan due to the silent alarms being activated but never putting at risk or increasing the owners or his family, employees, personal risk levels.

Our Technokontrol Home Security Engineering© Team of experts, designers, engineers can recommend the use of bullet proof(up to level VIII wall panels), sound proofing, anti-thermal detection, defensive "anti-attacker technologies" as the use of crying/tear gases, smoke bombs, complete electric black out systems, water flooding systems, high intensity sound waves/alarms, electric charge defensive systems without going into "armed defensive shooting points, traps, detention cages, blocking passageways" to stop, hinder, detain, arrest any " professional-paramilitary attacker-team" and protecting ones family, friends and employees until the authorities or private security arrives.





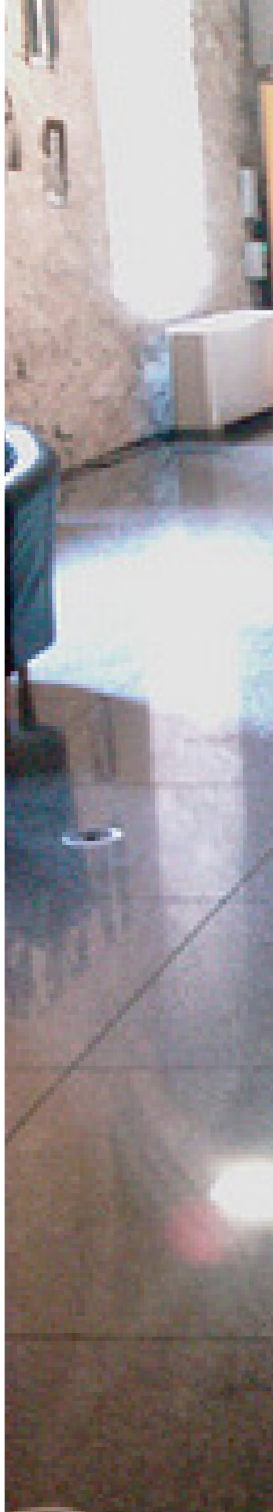
Security & Safety Concealed Rooms, Panic Rooms, Bunkers, Secret Floors

Technokontrol Security Home Engineering© vaults employ several security solutions to safeguard your valuables. A thief can not break into something he doesn't know exists; therefore, concealment is the primary security measure of a Technokontrol Home Engineering© vault. Our vault doors also feature a super strengthened mid-weight duty locking system for a strong resistance to forced entry, as well as a stainless steel interior finish, anti-thermal, anti-fire interior and the ability to interface with an existing home security system. This is of course extremely interesting but in a hostage situation its simple to open as one can image with a gun to one's head or even worse to a family member!

Panic Rooms, Bunkers, Secret Floors

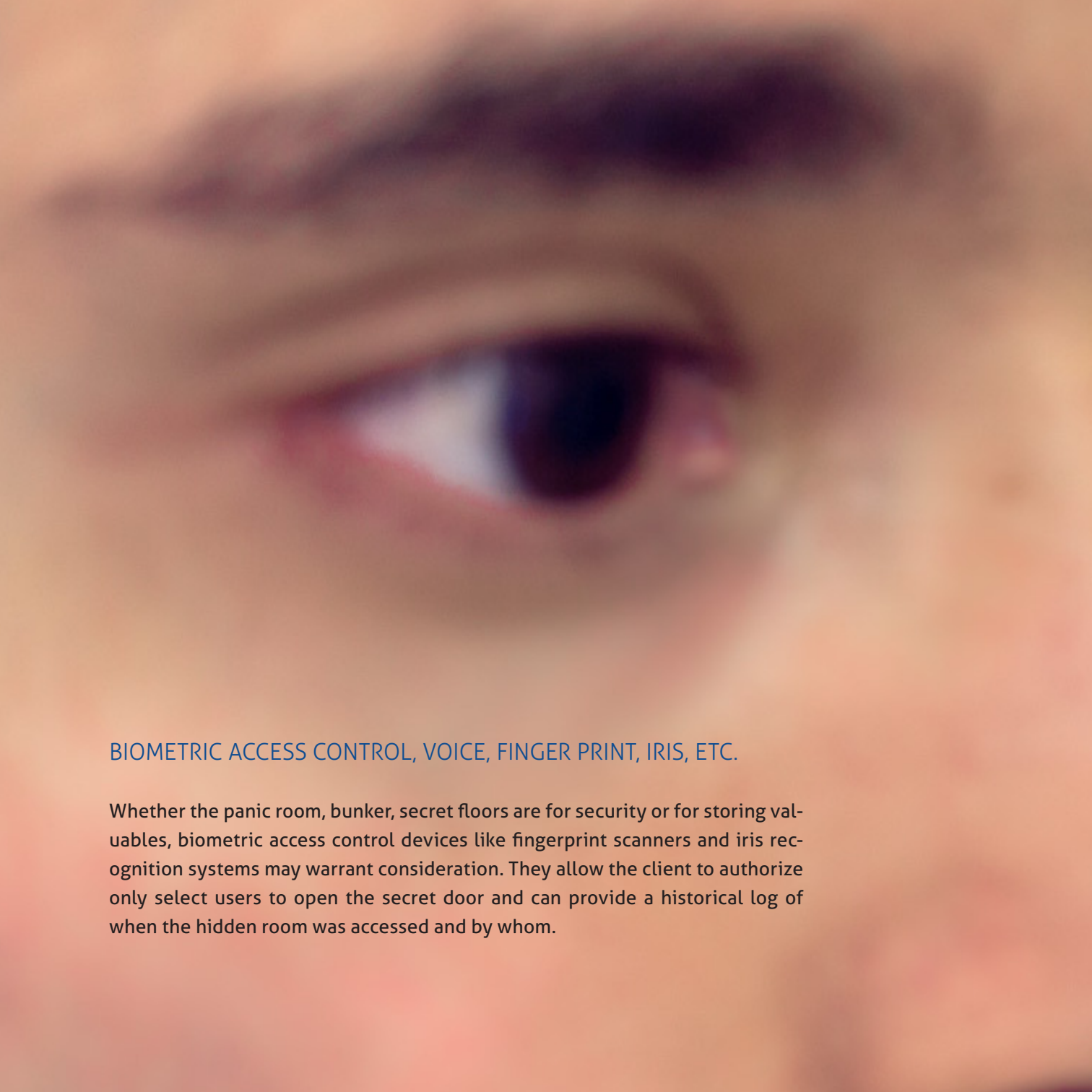
Panic room, bunkers, secret floors safeguard the most important treasure of all–family. Our panic rooms, bunkers, floors, have all the high security features of our vault doors, plus our many other security and safety features which we will address further below.

These rooms, bunkers, secret floors are impervious to forced entry, unaffected by power outages, and provide the highest level of security possible in the case of a home invasion. They may also be outfitted with armor plating and our hidden surveillance package so those inside the secret room can know when it is safe to come out.



ARMOURED DOORS

Technokontrol Home Engineering© has adapted a magnesium-steel composite armor plating system for use with its high-security secret doors. This system provides ballistic protection equivalent to Underwriters Laboratories Level III-VII standard: resists .30 caliber / 7.62 mm rifle fire and higher if required.

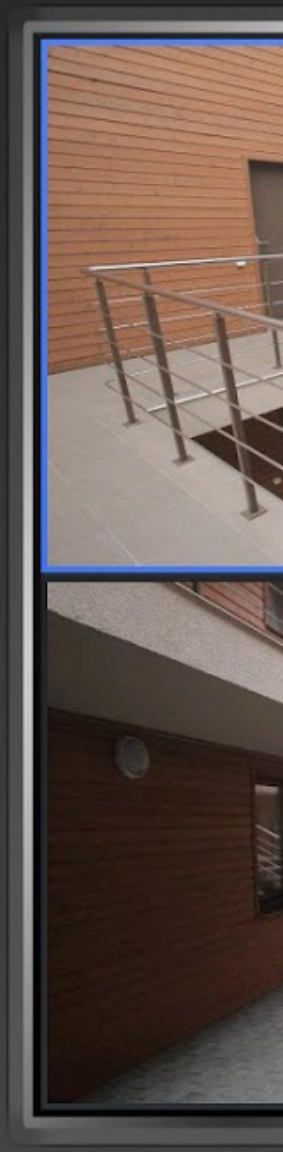


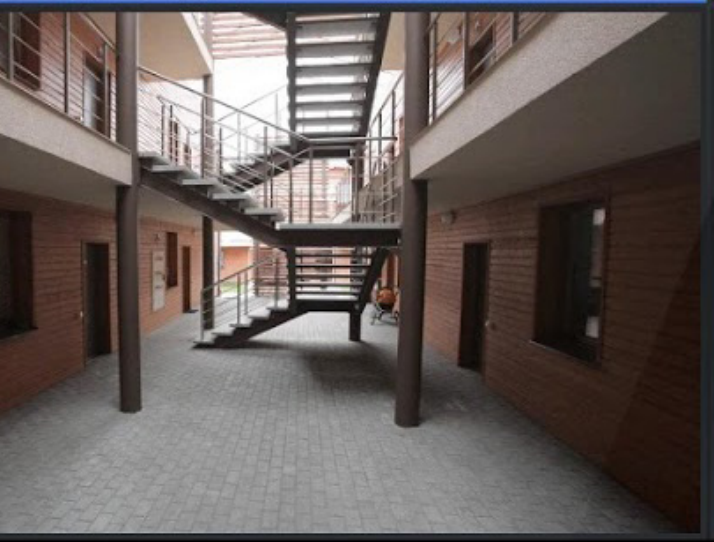
BIOMETRIC ACCESS CONTROL, VOICE, FINGER PRINT, IRIS, ETC.

Whether the panic room, bunker, secret floors are for security or for storing valuables, biometric access control devices like fingerprint scanners and iris recognition systems may warrant consideration. They allow the client to authorize only select users to open the secret door and can provide a historical log of when the hidden room was accessed and by whom.

SURVEILLANCE PACKAGES

Especially useful for the panic rooms applications, these practical feature also guarantees to impress anyone trusted enough to learn about the existence of the secret entrance/exit. An imperceptibly small pin-hole color video camera is concealed in one of the moldings and walls. These cameras are connected via closed circuit to a flat screen monitor recessed into the reverse side, allowing occupants of the secret, panic room, bunker to see who is on the outside or moving around the home, office, gardens, garages, estate, stables, etc.





Answers to Frequently Asked Questions

Do Technokontrol & Elite Viper Security Services Bunkers provide adequate ventilation and air filtration capabilities?

All bunkers and shelters come with both electrical and manual (backup) air ventilation functionality, assuring continual air supply in long term power failures. Adequately sized air vents (4" – 6" diameter), assuring adequate supply of air and temperature control. Metered air volume is deployed assuring critical residence time within the high efficiency particulate (HEPA) filter when processing chemical and biological war gasses within the storm bomb tornado shelters.

Pre-filters placed in line prior to processing of NBC contaminates, assuring protection of the HEPA filter from contaminates such as smoke, dirt, insects and larger radioactive particles. We use only ventilation and air filtration systems that have been tested and documented by a nationally recognized facility, assuring proper filter densities, air volumes, metering devices, blast protection, thickness of hose materials and metals and interior paints of the gas canister.

Can these Bunkers be designed & used in mobile operations or conditions for petrol-chemical industrial locations or exploration, mobile R&D bases, mobile housing usage?

We at Technokontrol and Elite-Viper Security Services (www.elite-viper.com) offer the complete "custom" design which any client, corporation may requiere for full protection against criminal and /or terrorist attacks especially armed and at high risk locations or global regions. These mobile bunkers/shelters can be transported, un-loaded, used and re-used in any location and with the benefit of also having bullet proof and even bomb blast protection to level VIII.

What would happen in the event of a fire, fire bomb attack on a mobile protected bunker or even blow touch forced entry attack?

All of our specialist military/special usage designed bunkers and shelters come a special patented anti-thermal heat/fire exposure panelling technology which will protect for over four hours direct heat exposures of over 1200ºC-1600ºC with direct blow tourch or even petrol fueled external criminal/terrorist attacks.

Do you provide Radiation Protection for the bunkers or shelters?

Protection from gamma radiation can be achieved with as little as 1 metre of dirt cover or 1 metre of concrete cover. Every 10 cm inches of dirt (and 6 cm of concrete) gives a halving thickness, or protection factor (PF) of 2. Ten halving thickness is required to diminish (attenuate) medium to high levels of radiation to an acceptable level.

2-3 metre feet of dirt cover is required to attenuate initial radiation to acceptable levels. Initial radiation occurs within the first minute of the blast and within a 1-½ mile radius of ground zero. Blast damage is also an issue at that range. All of our Bunkers shelters are designed to withstand gamma and initial radiation, as well as high blasts in the initial radiation zone.

Normal entrance doors are not thick enough to attenuate radiation to acceptable levels, and most of the radiation will enter the shelter through the entrances. TK- Bunkers has designed their entrances to attenuate gamma by providing a 90-degree turn, and long vertical and horizontal runs. The initial radiation must be attenuated with s 2metre of shielding placed into the horizontal run.

Installing an additional security/safety panellng patented technology this can be increased and even made to protect against EMPS.

Do you provide blast hardened steel bomb shelters/bunkers?

Technokontrol and Elite-Viper Security Services (www.elite-viper.com) specializes in offering very cost effective protection from the effects of nuclear weapons, biological and chemical weapons. That ordinary citizens can be so effectively protected to within 1 km of a large yield nuclear explosion for about the cost of a new pickup truck is remarkable. The concept can be from a simple steel cylinder of a usable size is outfitted with bulkheads, a deck, electrical system, ventilation system, and properly designed entrances, and buried to a suitable depth to ensure proper earth arching and shielding to a mobile level VIII bullet proof mobile and/or transportable bunker-secure container unit. If the wall thickness of the cylinder, bunker wall is thick enough, and the backfill is performed to industry specifications, such a structure will endure a nuclear shock that would destroy all above ground buildings within a 8 km radius of the blast.

Corrugated steel shelters were tested and proven at the Nevada test site to blast pressures of 200 psi. In order to achieve protection to that level, the shelter/bunker must have an arched ceiling and the dirt cover over the shelter chamber must be equal to or greater than the diameter of the shelter. At this depth, 'earth arching' is achieved. Care must be taken to properly match the gauge of the steel to the shelter diameter. We design all shelters/bunkers to this protection level. 2 metre shelters/bunkers are built of the proper gauge to be placed into a

2,5 meter hole and to safely withstand the burden of 2 metre of dirt cover plus the additional overpressure of 200 pounds per square inch of air blast. Nine-foot shelters can safely be installed into an 6 metre- hole. 3,25 metre shelters/ bunkers are designed to be placed into a 7 metre-foot hole with 3,95 metre feet of cover. Flat roofed steel shelters will not withstand these heavy burdens. They will fail catastrophically under these overpressure loads.

Do your underground/overground bunkers provide adequate EMP Protection?

Steel shelters/bunkers make a natural faraday cage and will protect all electrical equipment inside the shelter If there are no antennas or other electrical wires entering the structure. Every incoming wire potentially offers entrance of the electromagnetic pulse (EMP).

In some shelters we protect all critical radios and other vulnerable equipment in faraday cages to assure their survival. We make simple, inexpensive faraday cages from steel garbage cans. We wrap our equipment in soft towels or place them in cardboard boxes before placing them into the cage.

Technokontrol can install our unique and patented anti-EMPS wall, floor and ceiling panles to prevent overground/underground EMPS attacks, pulses, waves or even solar-space radiation with full anti-EMPS protection.

Do the bunkers provide Chemical and Biological Protection?

All Hazard' Shelters/Bunkers must be protected against the intrusion from chemical/biological war gasses. Gas tight doors and blast valves provide a slightly positive air pressure, as outside air enters the shelter and is filtered through the gas filter. This positive pressure holds un-filtered air from intruding into the shelter. This filtration process is standard with most shelter systems.

People requiring climatoligical, social, emergency,tornado and hurricane shelters, only, may wish to purchase the ventilator without the addition of the gas filter.

Some people wish to have an 'air lock' option. An air lock is a preliminary room used for entering and exiting the main shelter without contaminating the shelter room with outside air. See the section marked AIR LOCKS for design information.

Why are anti-terrorist, bomb, tornado, storm shelter/bunkers entrances important?

All bunkers/shelters should have at least two entrances to assure exiting recommending three in the event one entrance is blocked by debris. All entrances must be protected with steel blast doors. Most all of the radiation entering

the shelter will enter though the entrances. Distance and geometry play an extremely important role in the attenuation of radiation. It is mandatory that nuclear shelter entrances have both a vertical and horizontal component, connected with a 90-degree turn. To properly attenuate gamma radiation, the total entrance length must be at least 4 times the diameter, with the vertical and horizontal legs as close to the same size as possible.

Gamma radiation is a factor during the first two weeks after a nuclear event. Gamma radiation is directional and will not 'corner' well. The 90-degree turn between the vertical and horizontal run will attenuate 90% of the gamma radiation and the horizontal run will reduce the remaining radiation to a small fraction.

Initial radiation is more penetrating than gamma radiation. It is a factor during the first minutes of the explosion, and affects all the area within 2 km of the blast. People sheltering within that area will have lethal levels of initial radiation if they do not properly shield against this effect. The vertical and horizontal runs should each be between 3 metre and 4 metre long, and the diameter of the entrance should not exceed 90 cm. Initial radiation is not significantly attenuated by 90- degree turns. The horizontal run of the entrance, therefore, should be filled with shielding materials after the occupants have entered the shelter. Water, rice or any other material containing large amounts of hydrogen make good shields against initial radiation. These principles must not be compromised! Larger diameter entrances are comfortable and convenient, but the occupants may not survive if they are within the 2 km zone.

What do you recommend for entrance(s) into the bunker or emergency shelter?

Entrances may be put into buildings such as the home, garage or outbuildings. However, to protect against debris or fire, always place one entrance into the yard, exterior to the building.

Entrances may be placed on either the ends or the sides of the shelter. Side entrances free the interior flat ends for furniture or bathroom use. However, when figuring transport costs, a side entrance increases the overall width and will possibly increase the transport cost.

Lighting recommendations for the tornado storm shelter or underground bunkers?

Lighting is provided with both an AC and DC wiring system. Miniature 12-volt lights are placed every 2-3 metre along a ceiling unistrut. These lights use a standard bayonet base and may be replaced from stock found at your ordinary Radio Shack. These lights are protected against blast by their installation on a sturdy wire, which hangs a couple of inches below the unistrut. During a disaster, we plan to keep one (and only one) of these miniature lights turned on at all times. As a note, LED lights may be used to replace the standard lights in any of the tornado bomb storm shelters. They are expensive and may be vulnerable to the EMP effect. LEDs should be stored in a Faraday cage until after all threat of an EMP or other emergency situation has passed.

During non-emergency situations, we use the 12-volt fluorescent lighting system that comes with the shelter. We also have access to AC receptacles that have been placed every 2-3 metre along the ceiling unistrut, and can use them for plug in type lamps if desired.

How do you heat the storm shelters or underground bunkers?

We often speak of the scenario of experiencing a large earthquake in the middle of the night, and in the middle of the winter. At near or below zero temperatures, if unprepared, few people would survive the night. Our shelters would withstand a huge earthquake and all associated aftershocks. We have beds, food, water, light, communications, clothing and supplies ready in our shelters at all times. We could just go to our shelters, go to bed, and deal with the earthquake in the morning!

Shelters with 2 to 3 metre of dirt cover remain at a constant temperature between 7ºC and 18 ºC. As an example some of our shelters are installed in mountainous areas in below zero weather, but the interior temperature never goes below 7ºC-degrees. In the winter the occupants wear lightweight jackets or sweat shirts and feel very comfortable. As other occupants enter the shelter, the temperature will rise. Every person radiates as much heat as a 100-watt light bulb. The steel walls of the shelter act as a heat sink, and keep the shelter from becoming too warm. We highly recommend that NO insulation be placed on the walls or ceiling of steel shelters. No outside source of heat is needed. In non-emergency situations, if fuel and power are not an issue, the shelters can be heated with an electric space heater.

What are the available power options Safety Bunkers offers?

Batteries

We highly recommend using a 12-volt system over the 48-volt system. The 48-volt systems are very expensive and replete with problems. The 12-volt chargers and inverters are reasonably priced and very dependable.

Batteries do not come standard with our shelters. Everyone seems to have their own electrical preferences. All of our shelters, however, come wired for both a 12-volt DC and a 110-volt AC or the European standard of 220 volts systems. We would be happy, however, to direct you to good sources for batteries and supporting equipment. We have used a number of different batteries in our shelter systems. The two we prefer are the 6-volt golf cart batteries and the 6-volt 'gel-cell' batteries. Car batteries should not be used in shelters, as they have a totally different function.

Our first preference is the 6-volt gel-cell battery. Two of these batteries wired for 12 volts are rated at 180 amp hours or 2160-Watts hours. We recommend having no fewer than eight of the 6-volt batteries to run your shelter. In our experience, we have found that gel-cell batteries can be charged many more times with excellent recovery than can deep-cycle lead-acid batteries. They are two to three times more expensive, however they do not outgas and they have a much longer life expectancy. Gel-cell batteries require a special charger. We like the IOTA DLS 55 or DLS 75 charger.

We have prepared many storm bomb tornado shelters to run on battery power for at least 4 weeks, before needing to recharge. After that period of time, we plan to recharge the batteries with a small generator or other alternate power system. Solar panels are vulnerable to EMP, and may fail if left out during wartime.

Solar Panels

Solar panels may be used to recharge the batteries, but when not in use they should be stored inside the shelter for maximum protection from blast and EMP. They should be placed outside only after all danger of blast has passed. They may be adversely affected by the EMP. If in a remote area, consider putting out a 'sacrificial' panel and purchasing extra solar panels for later. Store these panels wrapped in aluminum foil, for 'EMP' protection, and keep them inside your shelter until use.

In remote areas, we use our 'sacrificial' solar panels to keep a charge on our batteries at all times. We know an EMP would most probably destroy the panels, but it is worth the sacrifice to have charged batteries when we arrive at the site. We usually run one 30-watt panel at a time. We keep several more solar panels inside the steel storm bomb tornado shelter to protect them from the EMP.

Don't spend your amp hours unwisely. Hand-pump your air system and eat precooked foods. Wear warm clothing and think only basic survival. Your battery

power should be used only for lighting and radio communication. The battery system is very important. Take care of them and keep them charged on a regular basis. It would be catastrophic to enter your shelter in an emergency with uncharged or damaged batteries.

Power Generators

We prefer diesel generators to gasoline or propane. Diesel fuel stores very well, if a stabilizer is added each year. We don't recommend storing propane or gasoline in an underground generator room. A small generator can be stored in your shelter room, but must be taken outside to run it.

We recommend the purchase of a diesel generator at (or smaller) than 2kW, for battery charging. Large generators are great for running a house, but the fuel will not be readily available after large-scale emergencies such as full scale EMP or full-scale nuclear war. The exception to the large generator rule is if you need to run a motor in a deep well.

Options

- 2kW Portable military, brush type diesel Generator. It has very low fuel consumption, running on about 1 pint per hour. Brush type generators are less vulnerable to an EMP.
- Brush type generators available in 8 kW, 10kW and 15 kW sizes. You may wish to purchase an extra voltage regulator, as it will be EMP vulnerable.

Communication suggestions?

Outside information is critical for your survival in a disaster. Plan to have several forms of communication. We suggest that you purchase a good short wave radio, CB radio, and if possible, an amateur radio in the 40 to 80 meter band area. CBs are useful at short distances and are 'line of site', only; but they will provide local information, which may be very important. The usefulness of two -meter radios is limited after a nuclear attack, because the EMP will destroy relay stations needed for two-meter transmission and reception, even though the radio itself, may have survived the event. Two meter radios, though much more expensive than CBs, will have the same resulting range. Amateur radios in the 40 to 80 meter range, on the other hand, will continue to function (if protected during the actual EMP event) because relay stations are not needed for their use.

We highly encourage at least one of the people assigned to your shelter, to become a licensed amateur radio operator. Form nets using similar maps, and practice disaster scenarios.

Though protected, radios may not function for a few hours to days because of disturbances in the ionosphere. After two full days, turn on and listen to your radio for short periods of time. It is psychology imperative that you have outside contact. Plan to use your CB or ham radio sparingly, as transmitting on these radios requires a great deal more power than when they are in the 'receiving' mode. If others that you know have shelters, plan to use the same frequencies.

Should a bunker or storm shelter contain furniture?

In areas believed to be more than 5 km from a prime target, various items of furniture can be added to the shelters. All shelters come standard with two sets of double bunks and two sets of single sitting bunks. The bunks add a great deal of comfort and a higher quality of rest. When maximizing occupancy, sleeping should be done in shifts, and each bunk used by a different person for 8 hours during the day. All bunks have hinged tops, providing room for tidy storage of personal items or supplies. The sitting bunks face one another and provide room for a fold-up table to slip underneath, out of site. Tables are convenient and provide a more normal atmosphere to the living space for eating and socializing.

If outside the 5 km heavy blast range, you may wish to have us add storage shelves, bathroom (including toilet, sink and gray-water drain); and a kitchen (with stainless steel sink, plumbing, 12 volt water pump, Formica countertop, and cabinets). In areas of high blast potential, keep furniture to a minimum. Use hammocks for sleeping and secure all items to the wall. You may want to substitute two additional lengths of unistrut on the wall, for your standard bunks. The unistrut would then be used to tie-down and secure equipment and supplies.

All shelters come standard with ladders for each of the two entrances. During installation, the 1 metre diameter entrance should be tilted to a 60 degree angle. The step ladder is designed to that angle. The 80cm diameter exit tunnel is designed for a vertical configuration to facilitate the lowering of supplies by a rope or small crane. The center floor panels are removable in 1.10 cm lengths,

down the entire length of the shelter. This provides easy access to supplies and keeps the shelter free of clutter.

Do the underground bunkers or storm shelters come with storage space?

We can allow for a 3 metre diameter shelter to provide one metre of under floor (basement) storage space as a point of reference. This is triple the amount provided in an eight foot diameter shelter. Nine foot diameter shelters have 2 feet of basement space, and 8 ft. diameter shelters provide one foot of under- floor storage. Ceiling space remains constant in 2,25 cm-3 metre diameter shelters, with a center height of 2-3 metre.

Storage under hinged bunk seats can be provided in some shelters if requested. Battery storage areas can be constructed upon request. Radio shelves (again upon request) fit nicely on the bulkhead, next to the ventilator.

2-3 metre diameter shelters/bunkers provide the most economical use of living and storage space for Euro spent.

Food and Water considerations?

We recommend storing a one year's supply of food and 200 litres of water per person. Water can be stored in 50-litre barrels, under the floor of 3 metre diameter shelters or in 100 litre barrels on top of the floor in all sizes of shelters. Water can also be stored under the floor in water bladders that form to the curvature of the tank, in any diameter shelter.

Water tanks can be buried outside with a hose attached to provide gravity flow into the shelter. These tanks must be covered with dirt at a depth that is double the diameter of the water tank. Water tanks at or near the surface are vulnerable to ground slap from blast and mischief from intruders.

Large water tanks and water bladders (inside or outside) pose the risk that you may lose your entire supply in the event the containers form a leak. We prefer to use 50 and 100 litre barrels for water storage; and in our personal shelters/ bunkers, we always store our water inside our shelters.

Cooking Suggestions?

During non-emergency situations we suggest cooking in microwave ovens or on electric burners. We never use propane or gas in shelters for the following two reasons. First, propane is heavier than air and if there is a leak, it could accumulate under the floor where it will pose an ignition problem. Secondly, the burning of fossil fuels, such as propane or gas, produces significant amounts of carbon monoxide.

During emergency operation, we do not use battery or electric power to cook. The preferred method of cooking during that time is via marine alcohol stoves. Unlike propane or gas, when alcohol burns it produces only carbon dioxide and water. Of course, any flame consumes oxygen and requires good ventilation. Alcohol fuel can be purchased at most any hardware or marine store. It is not explosive, but must be carefully stored, as it will act as an accelerant in the event of a fire.

How do we address sanitation for the storm shelters or bunkers?

Holding tanks and septic tanks are acceptable in areas of low or no blast and areas of no threat of chemical/biological war gasses. The tanks, however, are extremely vulnerable to ground slap from blast, and may crack or rupture during earthquakes. Flying debris from high winds during tornados, hurricanes or blast could break the lids of these tanks, and if they are at or near the surface the contents will be forced back into the shelter. We do not install flush toilets.

We prefer (and install) the most simple of solutions for bathroom facilities- chemical toilets- for the following reasons:

- Flush toilets require large amounts of water. Water is at a premium.
- Flush toilets require vents, which must have blast valves to protect the positive pressure within your shelter for protection from war gasses.
- Holding tanks cannot be emptied after a large-scale emergency.
- Septic tanks are vulnerable to blast and earth movement.

Use separate toilets for solid waste and urine. Cover solid waste with a disinfectant solution or kitty litter. Solid waste should be stored in barrels in double plastic bags, until it is safe to remove and bury it outside. Urine can be poured into the gray-water drain.

In the event of a nuclear or biological attack, you may not be able to return to your home to live. Bacterial agents may enter your above ground home through broken windows and the furnace ducting system. Sunlight will destroy bacteria that are on the ground, but it cannot reach inside your ducting system to destroy these agents. If your home is damaged or destroyed and you are forced to continue to live in your shelter, construct an old-fashioned 'outhouse' downhill from your shelter.

What are your Installation & Placement Recommendations?

Our Bunkers use only certified civil engineers when making your design, installation and placement plans. Among other services, we can give you geotechnical consultation on your soil type. Our bunker builders will provide construction plans for you in the event that you require an entrance from your shelter into a new or existing building.

Your installation site will dictate some of your design requirements. You must make careful consideration of your soil type. Clay type soils do not 'earth arch' well and need to be amended with a humus type soil in order to achieve the proper blast protection. Clay type soils also tend to allow water to accumulate in fissures around the shelter and will increase the possibility of water penetration. If you have clay, sand, or soils that do not drain well, you will need to place a drain field under the shelter, and amend or bring in fill, which will 'earth arch' more easily.

Sandy soils will arch if they are of the 'sharp edged' type. Very fine sand will need to be enhanced with a humus type soil. Often areas of fine sand will have variable water tables. You may wish to purchase a steel-plate shelter if you are unsure of the stability of your water table.

Many considerations must be made in the placement of your storm bomb tornado shelter. If you are in a blast zone, you will want to place your shelter exit well away from the foundation of buildings. The horizontal distance from the foundation of the home, to your outside entrance, should be approximately 1 ½ times the height of the building.

For fire protection, do not place your shelter entrances in heavily wooded areas. Clear the areas near the entrances of debris and do not place both entrances in or near large flammable buildings. Leave at least one entrance in a clear opening. If your yard has mature landscaping, sprinkler systems, or large trees, you may want to consider placing your shelter under your driveway, and accessing one entrance from inside your garage.

What goes into a typical Bunker Build?

Shelter body and end plates

- 90 cm-1,10 metre diameter entrance, with 90 degree turn
- 80 cm diameter exit, with 90 degree turn

- Two hardened blast doors with locks
- All needed 15 cm diameter schedule 40 steel air pipes
- Paint, (interior shelter body), (exterior epoxy on end plates)
- Flooring with removable center panels (for access to storage)
- Two ladders
- AC and DC wiring with DC lighting fixtures (both fluorescent & mini-volt)
- ANDAIR, VA150 ventilation system with both manual & power function
- GF150 NBC gas filter
- Pre-filter system
- Two-four blast valves
- Two-four sets sleeping bunks with individual storage compartments
- Two-four sets sitting bunks with individual storage compartments
- Chemical toilet
- Operations and maintenance instructions, (First Aid manual, Communications guidelines -Ham or amateur radio-, Life in the shelter)

We can customize your bunker, bomb, tornado, bullet proof shelter to include kitchen counter with sink, shelves, bathroom sinks and additional bunks. They

can be also medical units, fuel storage, telecomunication bunkers annexed to one or several bunkers units to interconnected and creating an underground/ overground high protection operational base for industrial, military, law enforcement, R&D, exploration usage for any region or climate.

What happens if the house falls on the top and we can't get out?

We have installed asnd fabricated fixed, semi-mobile, mobile bunkers over the years with no issue of structural or operational damage to, transports, structural or foundation of homes, offices, corporate, vaults, data-banks, HQ, etc. Our process is certified by structural engineers and meet ISO 9000-1 quality standards.

I am very claustrophobic. I don't think I can go down into a small hole in the ground and close that door.

With forced air ventilation claustrophobia should be greatly helped or eliminated, however there are several ways to overcome most of that. First of all, be

the last person in and leave the door open until the last possible second. You won't have a problem shutting it for a few minutes if it is only used as a standard tornado storm shelter. Most people feel better if they are in charge of the door. Generally speaking, people are only in their tornado storm shelter about 15 minutes. We also offer a 2.000 kg escape jack to lift any debris off of the top.

When the jobs done in what condition do customers receive their bunkers and shelters?

We train our crews to try to leave your bunker as though it would be ready for a "Final Delivery Inspection". We want you to be pleased with the results and returning again and again.


Family Room
75°F
outdoor
2:00pm
Listen
Lighting
Watch
Control4
More
Security
73°F
Comfort
Apps

Technokontrol Home Security Engineering Technologies & Systems Options


FINGER PRINT TECHNOLOGY

BIOMETRICS SAFETY & SECURITY TECHNOLOGY


THERMAL HEAT PROTECTION & DETECTION TECHNOLOGY

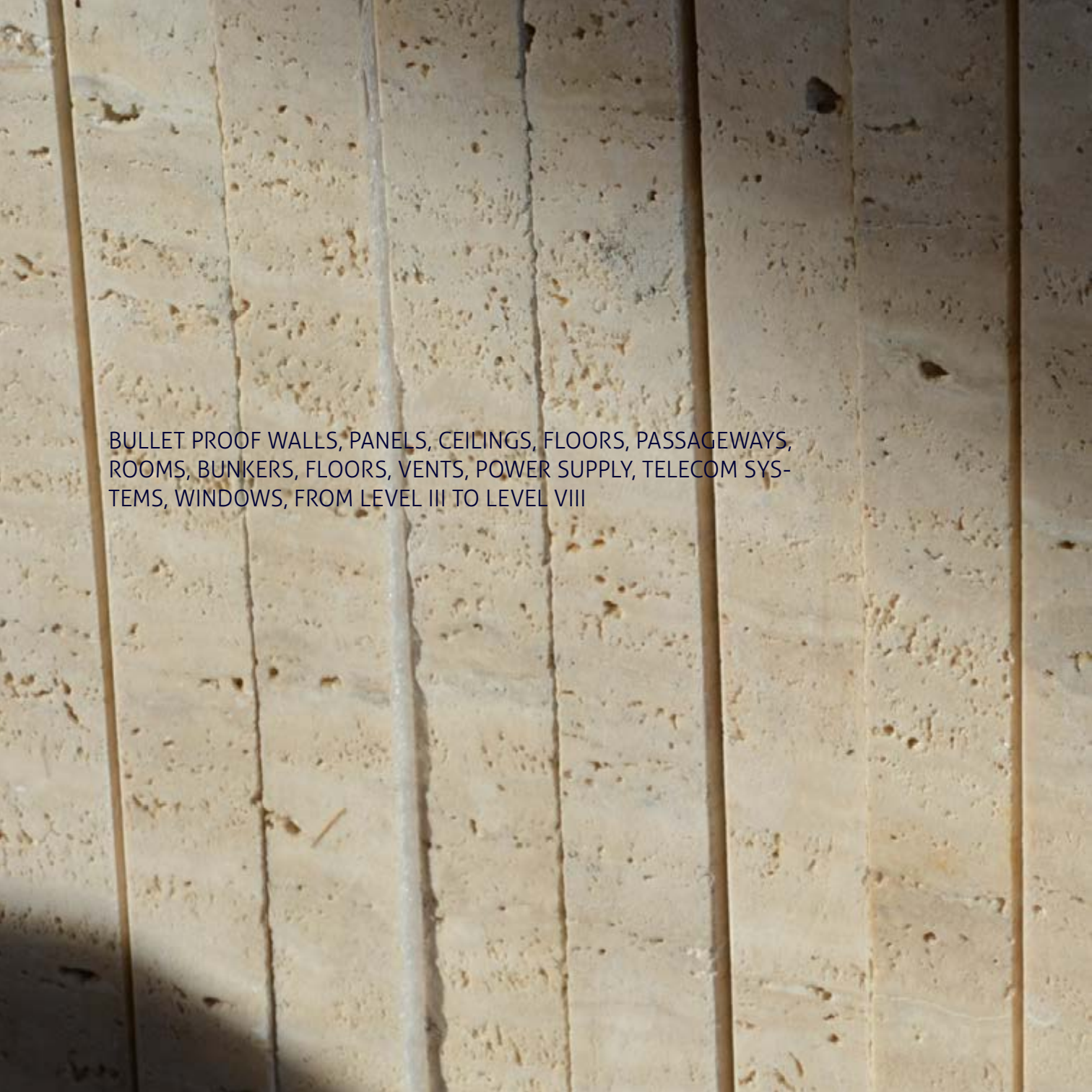

HIGH POWERED ACCUSTIC/SOUND ALARM SYSTEMS

NIGHT VISION TECHNOLOGY FOR TOTAL "BLACKOUT SAFETY &
SECURITY COUNTER-MEASURES" FOR TOTAL HOME PROTECTION


CODED ENTRY/EXIT AND EMERGENCY/AUXILIARY EXITS/ENTRIES AT
DIFFERENT LEVELS, FLOORS, ROOMS, FOR SECONDARY ESCAPE ROUTES


PRO-ACTIVE HOME DEFENSIVE TECHNOLOGY, LAUNCHING OF
EXTERNAL OR INTERNAL GASES, CHEMICALS, TEAR GASES, SHOCK-
BLAST GRANADES, FIRE ARMS SHOOTING EXITS, ETC.

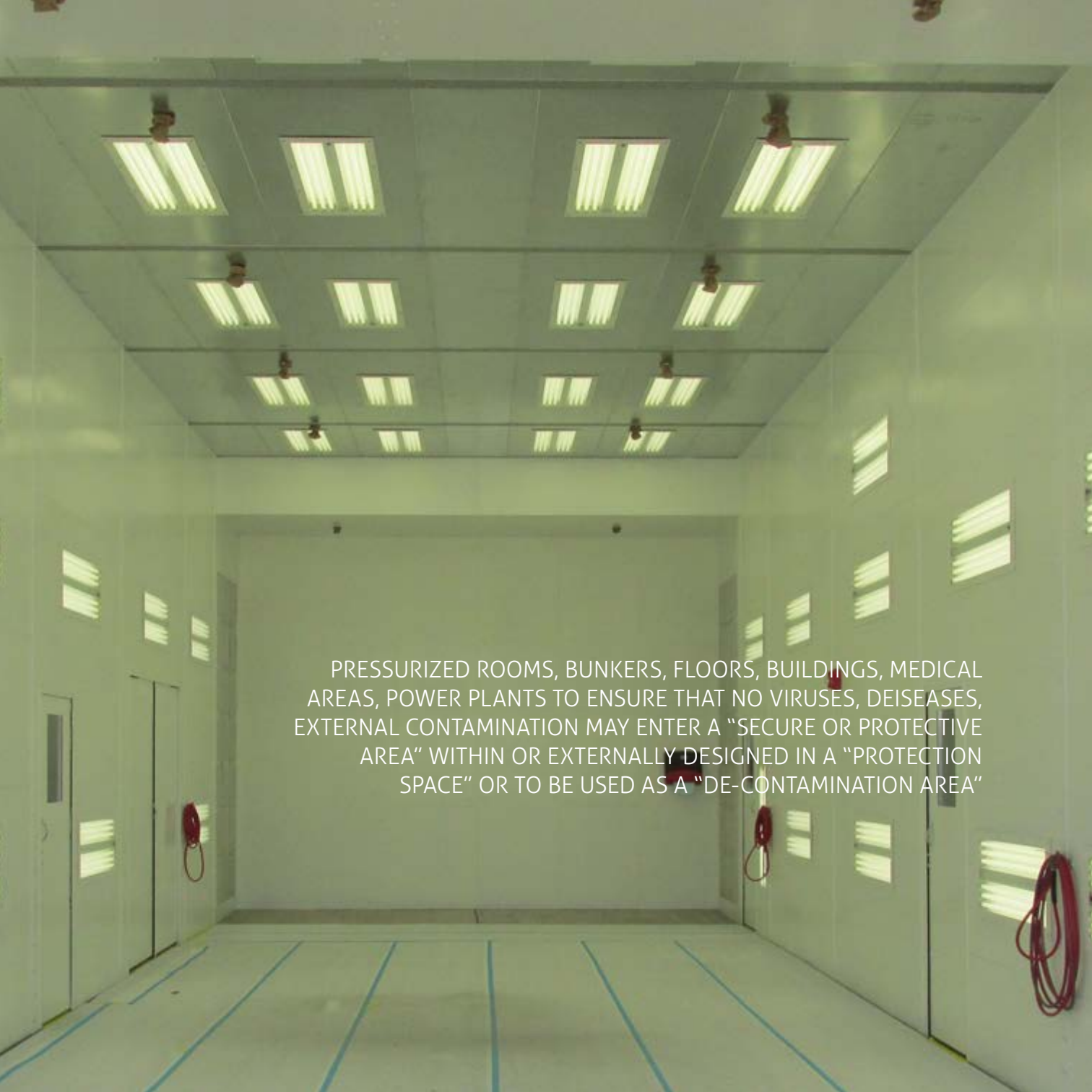
INTERNAL PRO-ACTIVE DEFENSIVE/ATTACK SYSTEMS TO HINDER "ALL TYPES OF ATTACKERS" WITH EXPLOSIVES, GASES AND CHEMICALS, ELECTRIC SHOCKS, ETC.



BULLET PROOF WALLS, PANELS, CEILINGS, FLOORS, PASSAGEWAYS, ROOMS, BUNKERS, FLOORS, VENTS, POWER SUPPLY, TELECOM SYSTEMS, WINDOWS, FROM LEVEL III TO LEVEL VIII

ANTI-ELECTROMAGNETIC PANELS, WALLS, CEILINGS, FLOORS, BUNKERS FOR PROTECTION AGAINST SOLAR RADIATION FALLOUT, NUCLEAR FALLOUT AND ELECTRONIC-MODERN WARFARE USING ELECTROMAGNETIC ATTACKS AND ARMAMENT

GAS MASKS FOR PROTECTION IN CASE OF ANY TYPES OF GASES BEING USED TO PROTECT ONESELF AGAINST A "GAS ATTACK" OR BEING ATTACKED WITH SIMILAR "DEFENSIVE GASES OR CHEMICALS" OR "SLEEPING GASES" FOR LONG TIME INTRUSION TIMES WHILE THE FAMILY IS ASLEEP



PRESSURIZED ROOMS, BUNKERS, FLOORS, BUILDINGS, MEDICAL AREAS, POWER PLANTS TO ENSURE THAT NO VIRUSES, DEISEASES, EXTERNAL CONTAMINATION MAY ENTER A "SECURE OR PROTECTIVE AREA" WITHIN OR EXTERNALLY DESIGNED IN A "PROTECTION SPACE" OR TO BE USED AS A "DE-CONTAMINATION AREA"

PRESSURIZED-AIR FILTERING BUNKER, ROOM OR UNDERGROUND FLOOR

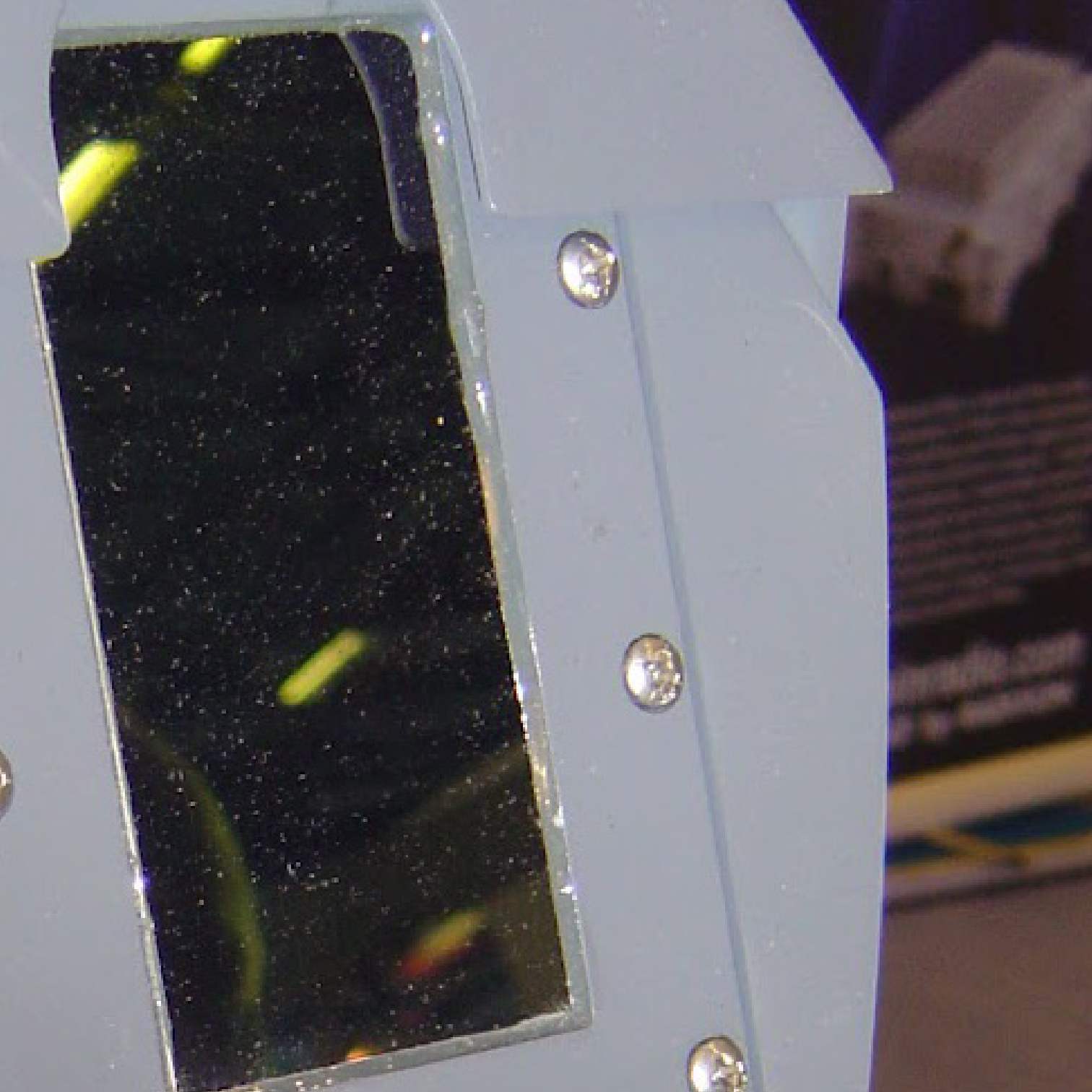
TECHNICAL VISUAL EXPLANATION DESIGN FOR THE USE OF AIR VENTS INTERNALLY & EXTERNALLY INSIDE A "PROTECTION AREA"


MOVEMENT DETECTION TECHNOLOGIES, HEAT SENSITIVE, LAZER
BEAM PROTECTION SYSTEMS, ETC.

HIDDEN WALL, DOOR, PANEL METAL DETECTORS FOR "RESTRICTED AREAS" IN THE HOME, OFFICE, WHERE "FAMILY PROTECTION" IS PARAMOUNT ESPECIALLY FOR CONTROLLING EMPLOYEES, VISITORS, PACKAGES, DELIVERIES, ETC.

EXPLOSIVE & CHEMICAL DETECTORS FOR THAT PARAMOUNT SECURITY LEVEL WHERE EVEN A COURIER PACKAGE OR VISITOR CAN MEAN A DISASTER

RADIATION DETECTORS FOR THE ENTRY OF ANY PERSONNEL, FOOD TESTING, DELIVERIES, EMPLOYEE, VISITORS, CLIENTS, PERSONAL CONTACT, ETC.



THERMAL/FIRE/HEAT PROTECTIVE WALL, DOOR, VENT PANELS FOR THAT EXTREME PROTECTION OF OVER 240 MINUTES AT 1600°C-2000°C DIRECT FIRE BLAST, WELDING TORCH, TO PROTECT THE INNER CORE AND MOST PROTECTIVE AREA OF THE BUILDINGS, PANIC ROOMS, BUNKER, FLOORS, ETC.

Technokontrol Safety & security technologies prides itself in having also designed and incorporated in many clients assets from homes to yachts, vessels and cars. These anti-explosion storage fuel tanks for these VIP Homes, offices, personal assets, sporting or hobby vehicles where stored and used fuels as diesel, gasoline, kerosene, gas tanks, gas cylinders can be used to increase an external explosion or internal gas, fuel, vaporization vapour, fume leak explosions with grave personal, family and assets damaged consequences thus even these security points must be considered as paramount as the "explosion-heat-thermal-expansion wave" can reach and cover easily over a block of hundreds of metres with devasting damage.

We recommend that any fuel storage facility near or on the property must be protected with Technokontrol Anti-explosion, anti-fire, anti-thermal alloys to prevent also any possibility of explosion and even the clients cars fuel tanks should be protected as we can demonstrate that one European President life was saved using our Technokontrol, anti-explosion fuel tanks in his VIP, armored vehicle.

TECHNOKONTROL HOME SECURITY ENGINEERING CAN AVOID ALL TYPES OF ARMED INCIDENTS & NATURAL DISASTERS

01. HOSTAGE TAKING TO OPEN SECURITY VAULTS OR FORCING RANSOMS.
02. COMMON THIEVES OR VANDALS.
03. ARMED ROBBERS.
04. PROFESSIONAL ARMED ROBBERS & PARA-MILITARY SPECIALIST GROUPS.
05. GANGS ATTACKING AND ROBBING COMMERCIAL/OFFICE BUILDINGS.
06. PARA-MILITARY ARMED GROUPS.
07. CHEMICAL & GAS ATTACKS.
08. ELECTRONIC WAVE PULSE (EMPS). SOLAR RADIATION/MILITARY/ TERRORIST/ SABOTAGE ELECTROMAGANETIC ATTACK
09. NUCLEAR ATTACK & NUCLEAR FALLOUT.
10. HURRICANES & TROPICAL STORMS.
11. TSUNAMIS & HURRICANES.
12. TORNADOES & ELECTRICAL STORMS.

13. FOREST FIRES CREATED BY STORM LIGHTLING, HUMANS, SABOTAGE, VANDALS .
14. FLOODINGS.
15. RIOTS & CIVIL UN-REST.
16. TERRORIST ATTACKS & MILITARY ATTACKS.
17. HOUSE/OFFICES FUEL & GAS TANK BOMBINGS.
18. HOME/OFFICE RADIATION TESTING.
19. INDOOR AIR QUALITY FILTERING TECHNOLOGIES.
20. DE-CONTAMINATION INDOOR/OUTDOOR TECHNOLOGIES.
21. HOUSE/OFFICE DEFENSIVE ARMED SHOOTING PORT HOLES FOR ARMED TEAR GAS, SMOKE GRANADES, LIVE AMMUNITION DEFENSIVE ATTACKS.
22. EMERGENCY KITS FOR EXTERNAL USE.
23. ARMED SECURITY VAULT FOR DEFENSIVE /PRO-ACTIVE ARMED PROGRAMS.

24. UNDERGROUND BUNKERS & EMERGENCY ENTRY/EXIT POINTS FOR MID-LONG TERM DURATION SAFETY & SECURITY PROGRAMS.

25. FAMILY EMERGENCY FOOD & SUPPLIES FOR MID-LONG TERM EMERGENCY USAGE IN ANY EVENT.

26. MID-LONG TERM FOOD & WATER SUPPLIES FOR PANIC ROOMS, BUNKERS, SECRET BUILDINGS, ETC.

27. MEDICAL EMERGENCY FIRST AID SUPPLIES & MEDICAL-HEALTH/ OPERATING EQUIPMENT.

28. EMERGENCY TELECOMUNICATIONS SYSTEMS AND BROADCASTING TECHNOLOGIES.

29. EMERGECY WIND POWER & WOOD BURNING ELECTRICITY/POWER GENERATING POWER PLANTS.

30. EMEGENCY POWER PLANTS FUELED BY ALL TYPES FO FUELS AS FUEL, PETROL, GASOLINE, BIODIESEL,DIESEL, COOKING OIL, BURNT/SPENT OILS, FATS, WOOD PELLETS, KERONSE, GAS, JET FUELS, ETC.

31. EMERGENCY MOBILE SOLAR POWER/GENERATING PLANTS.

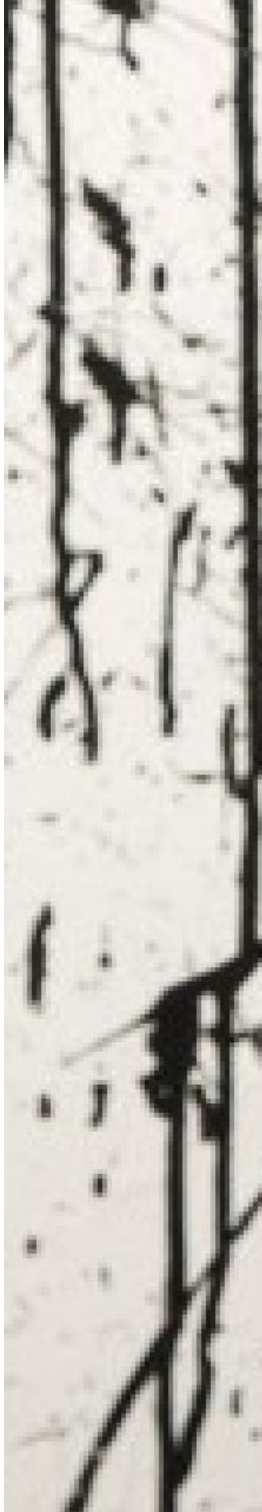
32. EMERGENCY WATER FILTERING TECHNOLOGIES

33. ANTI-EMPS (ELECTROMAGNETIC WAVE/RADIATION), JAMMER TECHNOLOGY, BULLET, THERMAL PROOF.

01. HOSTAGE TAKING TO OPEN SECURITY VAULTS OR FORCING RANSOMS.

02. COMMON THIEVES OR VANDALS.

03. ARMED ROBBERS.




EVER

04. PROFESSIONAL ARMED ROBBERS & PARA-MILITARY SPECIALIST GROUPS.

05. GANGS ATTACKING AND ROBBING COMMERCIAL/OFFICE BUILDINGS.

06. PARA-MILITARY ARMED GROUPS.

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ELS
SUPREMS

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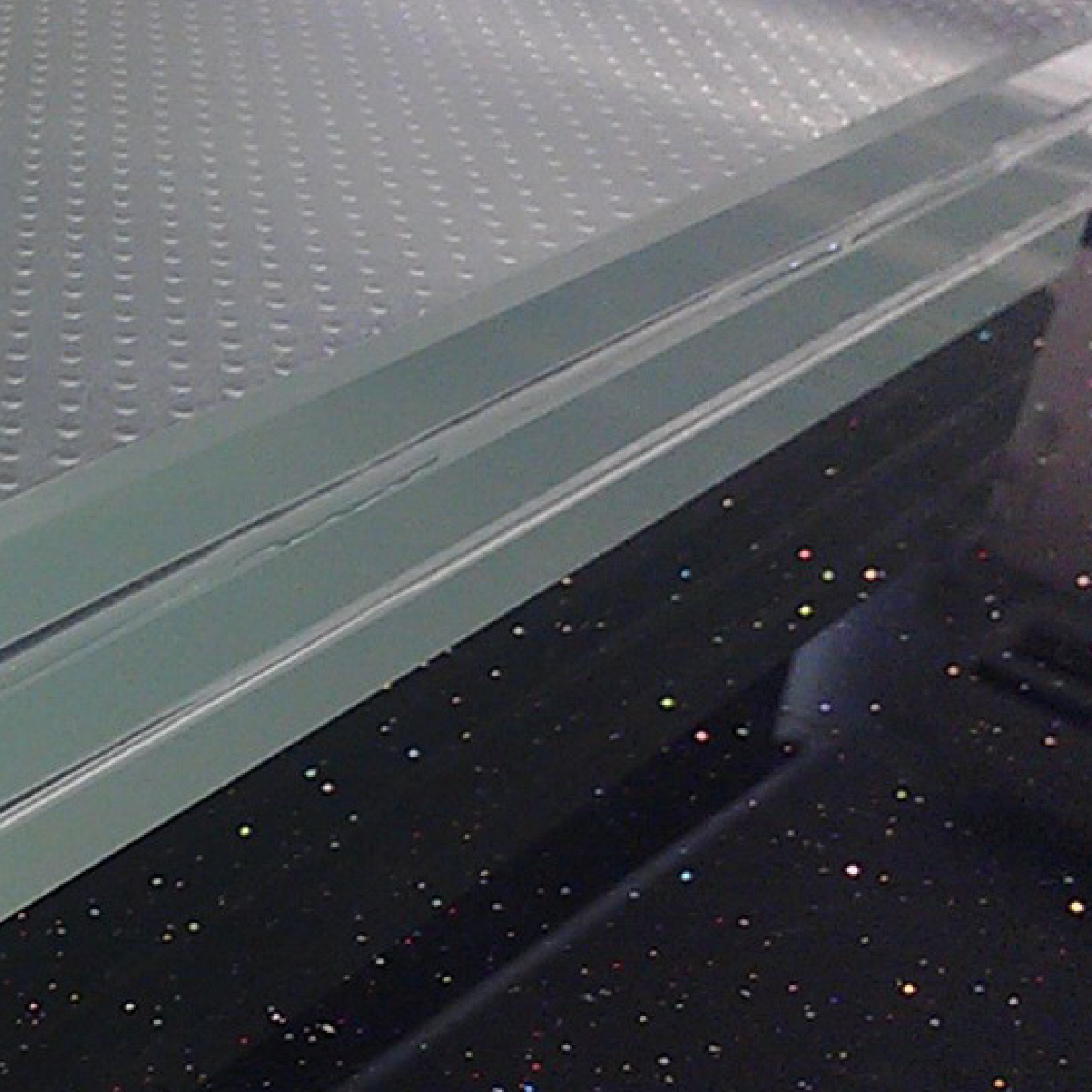
20kW


Fire/Thermal/Bullet
Proof Panel



Technokontrol Bullet Proof & Thermal / Fire Safety Technologies.

Introduction to Bullet-Resistant & Thermal/Fire Protective Materials

Purpose

Bullet-resistant materials are commonly used where the threat of attack by an armed criminal is likely. While the level of security risk at most facilities doesn't warrant the use of such materials, some facilities, due to the nature of their operation or their location, do find the use of bullet-resistant materials to be a necessary security precaution.

Bullet-resistant materials can both protect employees as well as discourage robbery attempts and other types of crimes involving the use of a firearm. Bullet-resistant materials are commonly used at banks, pharmacies, check cashing centers, and other businesses that handle cash or narcotics in high-risk neighborhoods. Bullet-resistant materials are also used at public facilities such as police stations, jails and courthouses.

In recent years, certain types of facilities that didn't previously use bullet-re-

sistant materials are now using them. For example, hospitals in high-crime areas now use bullet-resistant materials on the exterior of their Emergency Departments to protect against gang-related drive-by shootings. Also, some data centers now install bullet-resistant materials in their lobbies to prevent forced takeover of the facility by armed attackers.

Type of Bullet-Resistant Materials

There are four main categories of bullet-resistant materials: bullet-resistant glazing, bullet-resistant panels, bullet-resistant doors, and bullet-resistant accessories.

Bullet-Resistant Glazing

Bullet-resistant glazing is probably the best known type of bullet-resistant material. Bullet-resistant glazing is used when ballistic protection is needed, but direct visual contact is also required between the protected area and the non-protected area. Bullet-resistant glazing is commonly used at bank teller cages and other types of service counters, providing protection between the public area and the area that contains the cash or other valuables. Bullet-resistant glazing is also used on the interior of lobbies, providing separation between the public and non-public side of the lobby. In addition, bullet-resistant glazing is sometimes used on the exterior of the building to protect against stray gunfire or attacks from a sniper.

There are four commonly used types of bullet-resistant glazing, each with their own advantages and disadvantages. The following is an overview of each type of material.

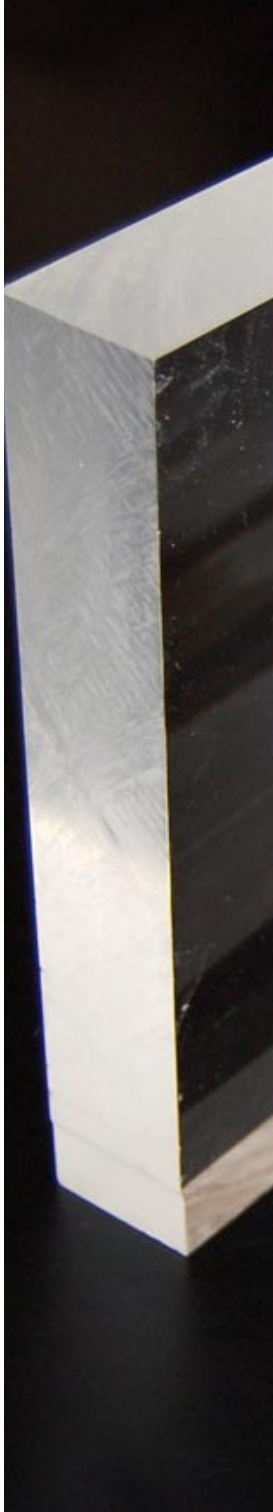
Laminated Glass

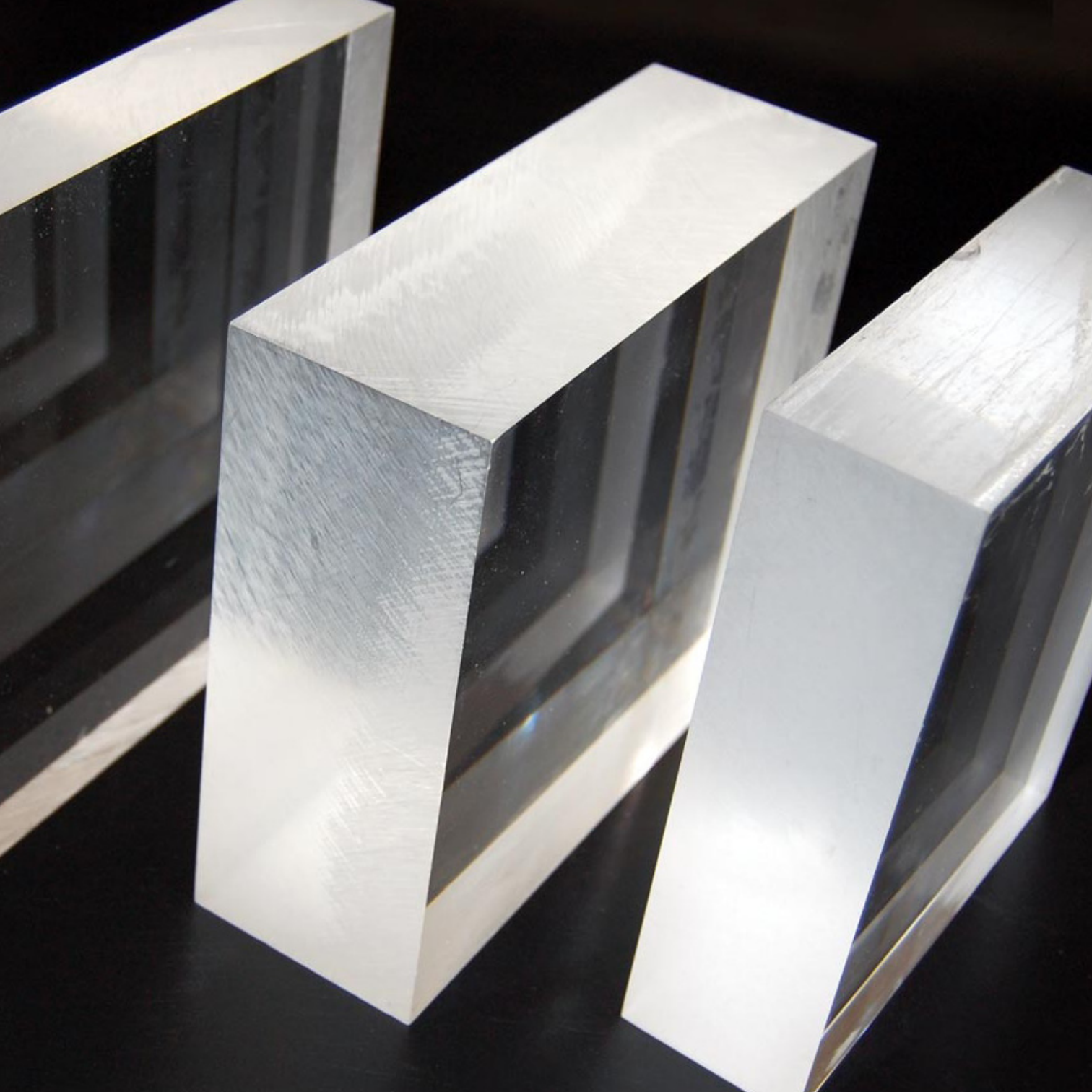
Consists of multiple layers of glass laminated with protective interlayer, usually polyvinyl butyral (PVB).

- Least expensive type of bullet-resistant glazing.
- Suitable for both indoor and outdoor use.
- Scratch-resistant.
- Because it is glass, it can be broken, and does not provide protection against a sustained physical attack.
- Heaviest type of bullet-resistant glazing; weight may require special structural considerations.

Acrylic

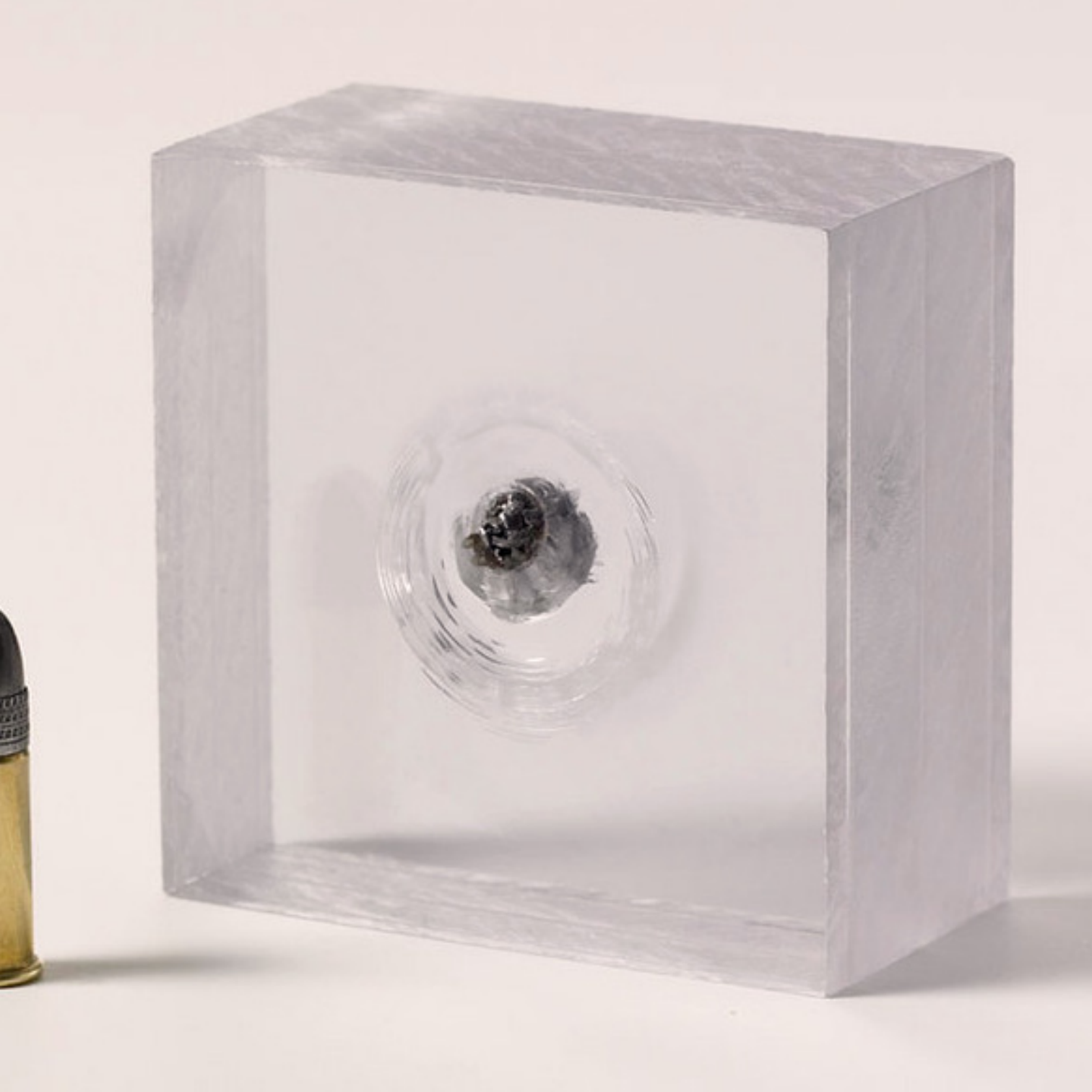
- Suitable only for indoor use.
- One-half the weight of glass.
- Scratches relatively easily unless provided with special coating.
- Available only in lower ballistic ratings.
- Offers some degree of protection against physical attack.





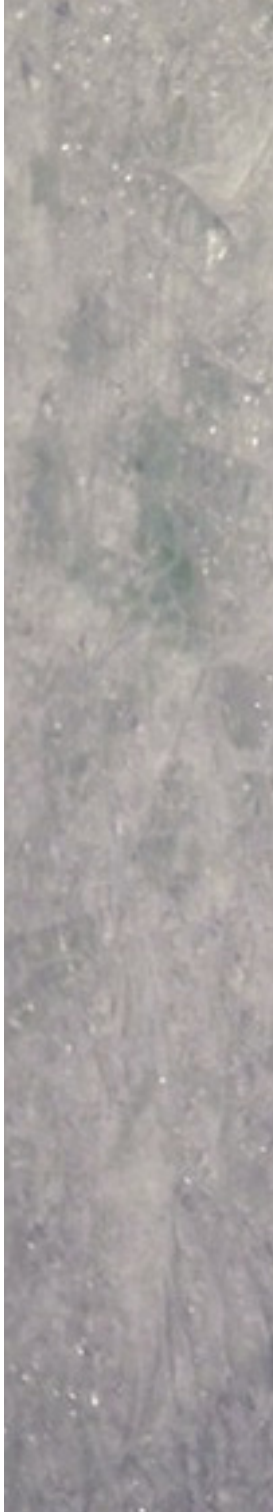
Polycarbonate

- Suitable only for indoor use.
- Weighs less than glass.
- Best ability to fully capture incoming bullet, prevents ricochets and spalling.
- Offers protection against physical attack.
- Has slight grayish tint; not as clear as glass or acrylic.
- Scratches relatively easily.
- Costs more than laminated glass.



Glass-Clad Polycarbonate

- Consists of polycarbonate with a layer of glass added to it.
- Suitable for indoor and outdoor use.
- Glass side resists scratching and provides weather-resistance.
- Weighs less than glass.
- Offers protection against physical attack.
- Has slight grayish tint; not as clear as glass or acrylic.
- Costs more than laminated glass.



TECHNOKONTROL BULLET-RESISTANT PANELS

Bullet-Resistant Panels

Bullet-resistant panels are most commonly used to protect the walls surrounding the openings where bullet-resistant glazing is used. For example, if bullet-resistant glazing was used at a customer service window in a pharmacy, bullet-resistant panels would be used in the wall on both sides of the window as well as below and above the window itself.

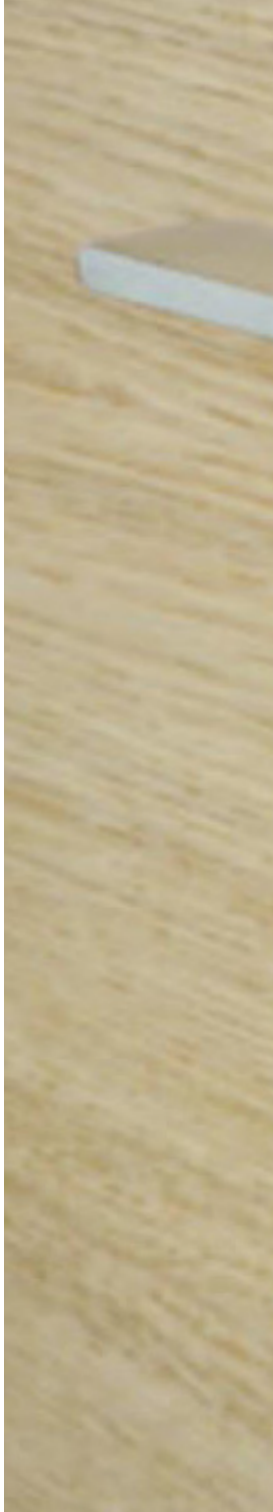
The use of bullet-resistant panels allows walls to be constructed using standard stud-wall construction techniques rather than requiring that a concrete or masonry wall be provided. Bullet-resistant panels are typically fastened to the studs and then covered with regular drywall. When painted, the bullet-resistant wall looks like any other.

There are two popular types of bullet-resistant wall panels: steel, and fiberglass composite. Steel wall panels are the least expensive but weigh more. Steel wall panels are difficult to work with on the job site and usually must be ordered from the factory in the desired size.

Fiberglass composite wall panels cost more than steel wall panels but weigh about half as much. Fiberglass composite panels are much easier to work with and can be cut and drilled on the job site.

Bullet-Resistant Doors

Bullet-resistant doors are used when a door is required in a wall that forms part of a bullet-resistant barrier. Bullet-resistant doors are specifically designed to provide ballistic protection and usually come as a complete unit consisting of both door and door frame. Bullet-resistant doors come in both wood and metal versions and are available with or without windows.



Bullet-Resistant Accessories

Bullet-resistant accessories are used when it is necessary to pass objects through a bullet-resistant barrier. Bullet-resistant accessories are also used to allow direct audio communications between both sides of the barrier. Bullet-resistant accessories include speak-through devices, money trays, gun ports, and package receivers that allow packages of various sizes to be passed through the barrier.

International Ballistic Ratings

Bullet-resistant materials are sometimes incorrectly called "bullet-proof" materials. Most of these materials are in fact not bullet-proof, but only provide protection against a certain range of types of firearms for a certain period of time.

Firearms are available in a wide variety of calibers, each which have a different ability to penetrate a bullet-resistant material. Even within cartridges of the same caliber, there are different bullet weights and types and different powder loadings. Rifle cartridges generally have much more power than handgun cartridges, and shotguns may pose a different type of threat than either handguns or rifles. Repeated gunfire against the same surface also has a different effect than a single bullet does.

To help sort through all of these variables, Underwriters Laboratories (UL) has developed a written standard, UL 752, that establishes ratings for bullet-resistant materials. UL 752 specifies eight levels of bullet-resistant ability, ranging from Level 1 to Level 8. The most common ratings used by commercial businesses are:

- **Level 1**
  Provides protection against 9mm and less powerful handgun cartridges.
- **Level 2**
  Provides protection against .357 magnum and less powerful handgun cartridges.
- **Level 3**
  Provides protection against .44 magnum and less powerful handgun cartridges.

Level 4, 5, 7, and 8 are generally needed to provide protection against common rifle cartridge calibers. UL 752 also has supplementary ratings for threats from a shotgun.

In general, the higher the rating level, the better the protection, but the greater the cost. Higher rated materials are also generally thicker and weigh more, and there may be a limited availability of materials and accessories at the higher rating levels.

CURITY

STED

Bullet Resisting
UL Control No. 52
UL752 Level 3

Suggestions for Using Bullet-Resistant Materials

01. The decision to use or not use bullet-resistant materials should only be made after a comprehensive security assessment has been conducted. The security assessment should provide guidance as to where bullet-resistant materials should be used, and establish the minimum UL rating level required based upon the level of risk at the specific facility.

02. A systems approach must be taken when designing a bullet-resistant barrier; the wall, glazing, and any accessories must all be rated to provide the minimum desired UL rating level. It doesn't make sense to provide a Level 3 rated window when the wall surrounding the window is unprotected. Also consider the possibility of ricochet and the potential for a bullet to penetrate the adjacent walls, ceilings, and floors.

03. Always use materials that are UL listed and labeled. Some manufacturers can be deceptive and use terms such as "tested to UL standards", "meets requirements of UL Level 3", etc. even though their products haven't actually been tested by UL.

04. The thickness and weight of bullet-resistant materials can have an impact on building construction and may affect everything from the size of the structural beams to the type of window coverings used. Be sure to involve your architect or other design professional in the planning of your bullet-resistant system.

05. Employee security awareness training must be provided in conjunction with the installation of a bullet-resistant barrier. Employees need to know how to react when a weapon is presented, even if they are behind a protective barrier. Employees may also be at increased risk when entering or leaving the protected area, and need to be given guidelines on how this can be accomplished safely.

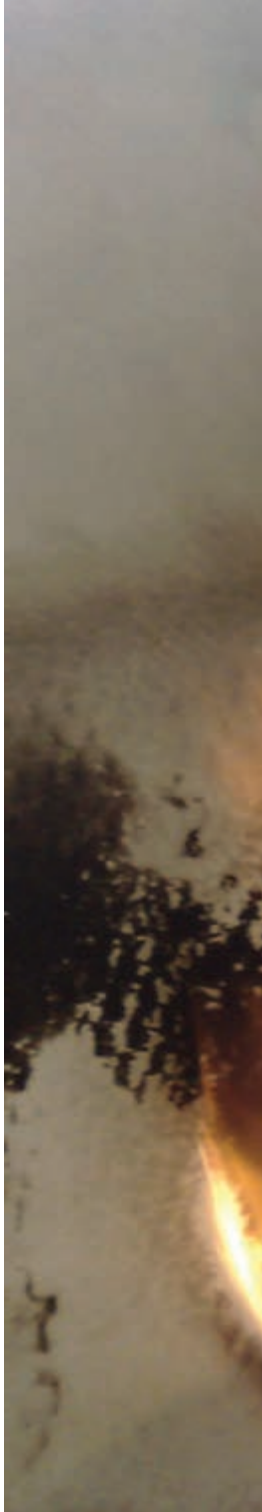
Technokontrol Bullet-Proof & Heat/Fire Resistant Wall Panels

Due to many of Technokontrol clients being governments, large international corporations and private individuals based in countries where the risk of terrorism or sabotage is greater due to geo-political or religious/social/military/crime issues we have the possibility to combine our heat/fire resistant 13mm thick wall panel which protects up to 1600º direct heat/fire blast for over three hours with a Level III bullet Proof protection panel.

Due to both panels not extending in joint/combined dimensions 26-30mm this is a great product to stop fire/heat exposure due to accidental fire, terrorism or fire bombs attacks and at the same time direct arms attacks up to Level III-VIII+. In the event of the client wishing to increase either or both levels or protection this can be easily done by joining more panels to increase its protection levels.

Panel protection: up to 1600º direct heat/fire blast for over three hours with a Level III-VIII+ bullet-proof security panels attached, annexed, etc.

The use of the Technokontrol Fire / heat panel is also extremely interesting especially in high level buildings as skyscrapers or tower blocks where fire is the real danger to these buildings as time becomes a " life or death" situation as in many cases seen recently in the media around the world where even the fire



services couldn´t reach the higher parts of the tower blocks and the internal fire emergency systems have failed causing many injured and human deaths.

The use of our Technokontrol heat/fire panels offers our client more than three hours of protection of fire / heat exposure containing the fire in all or selected protected areas and to increase the chances of evacuation and allowing more time for the local fire or internal emergency services to arrive and to assist.

As crime is becoming a daily and more of a common issue around the world and at any time a criminal group may decide to attack / rob a clients home or business using our joint panels Fire/heat-Bullet Proof reassures our client that his building has enough protection to withstand a direct fire arm attack during some time until the police or security services arrive and assist the clients. In the event of using our panels another great benefit is the little use of installation overall space required of 26-30mm which allows any client or building firm

not to lose great amounts of valuable space lost in the internal or external walls of the building and also reducing overall weight of the building / structure but maximizing the building security and overall its protection to the highest levels possible.

The Technokontrol panels can be attached on to already present walls or can be used as internal new panels hence the client than can install the panels in new buildings and for already built buildings as the client may wish to only use them in certain areas or exposed areas of their homes or businesses allowing the client to decide where he may require these protection panels. Depending on the design of the building we can arrange that the bullet proof panels to made of flexible bullet proof/Fire/Heat proof textile materials or hard wall panels allowing again for the client to decide of any type of design or unusual forms or shapes of their buildings, homes, offices or even security "anti-panic" rooms or private bunkers.

Technokontrol in the Security, Safety, Construction, Law Enforcement & Military Industries

In an industry where there are more and more accidents occurring every year both on a residential and industrial basis, we at TechnoKontrol believe that it is vital that we keep working so as to improve the quality of the products used within the Construction Industry.

Therefore we promise to work alongside all governmental agencies and architects so as to work towards changing legislation in order to ensure that the construction industry becomes both safer and more cost effective in the areas of anti-explosion, non flammable and heat resistant products.

Although we are constantly working so as to bring new products to the market place, at present we can provide our customers with the following products.

Anti Explosions; non flammable; heat resistant Wall/Ceiling and Duct Systems along with Board Panels/Collar Systems which are usable both in the Industrial and Residential industries alike.


DEERE

We believe that our products are more durable than that of our competitors as our products can withstand 1600°C for up to and past 3 hours, whilst current industry standards shows us that our competitors products can only withstand 650°C for up to 1 hour. Our products are also thinner than that of our competitors as our products only measure 13mm in width and finally we believe that our products are more cost effective (customized quote provided on application) than what is presently recognized as the current industry standard.

TechnoKontrol is currently working with many of the world's largest insurance companies so as to reduce insurance premiums by between 15%-30% on any item that carry's our specially designed product.

Technokontrol Wall-Ceiling System

At TechnoKontrol we are proud to announce that we have developed the thinnest, safest and most financially viable "fire proof wall system" currently available in the market place today.

Our Wall System is built around a plaster composite panel with a non-combustible mineral alloy fibre made with our exclusive VI-VII-VIII alloy core. This is ideally suited for the construction of non-load bearing walls and offers an "any climate" dry installation.

Of its many features the one which is most popular with our current clientele is that of our Wall Systems ability to be dismounted and reused in any new location, as this is something that no other fire rated wall assembly can offer in today´s market.

Our TechnoKontrol Wall system is available as standard in an aesthetic smooth white finish however, alternative colours and finishes are available on request.

Available standard size	Protection
13mm (1.3cm) thickness	+3 hour fire rated wall @+1600°C

If a customer wants a panel thicker or more resistant to fire can do, with a price increase by using more sophisticated alloy or as something much more but that is a matter of special customers.

Benefits of our Technokontrol wall systems are

- Reduces installation and scheduling time.
- Predictable - simple and easy to install allowing for more accurate project completion dates.
- Large manufactured components deliver consistent high standards of quality and performance.
- Cost competitive in many applications, both for new and retrofit projects.
- As TechnoKontrol works in conjunction with all major insurance companies we are confident that we are going to be able to reduce your insurance premium by at least 15%-30%. For further information contact one of our financial experts today.

Board Panels

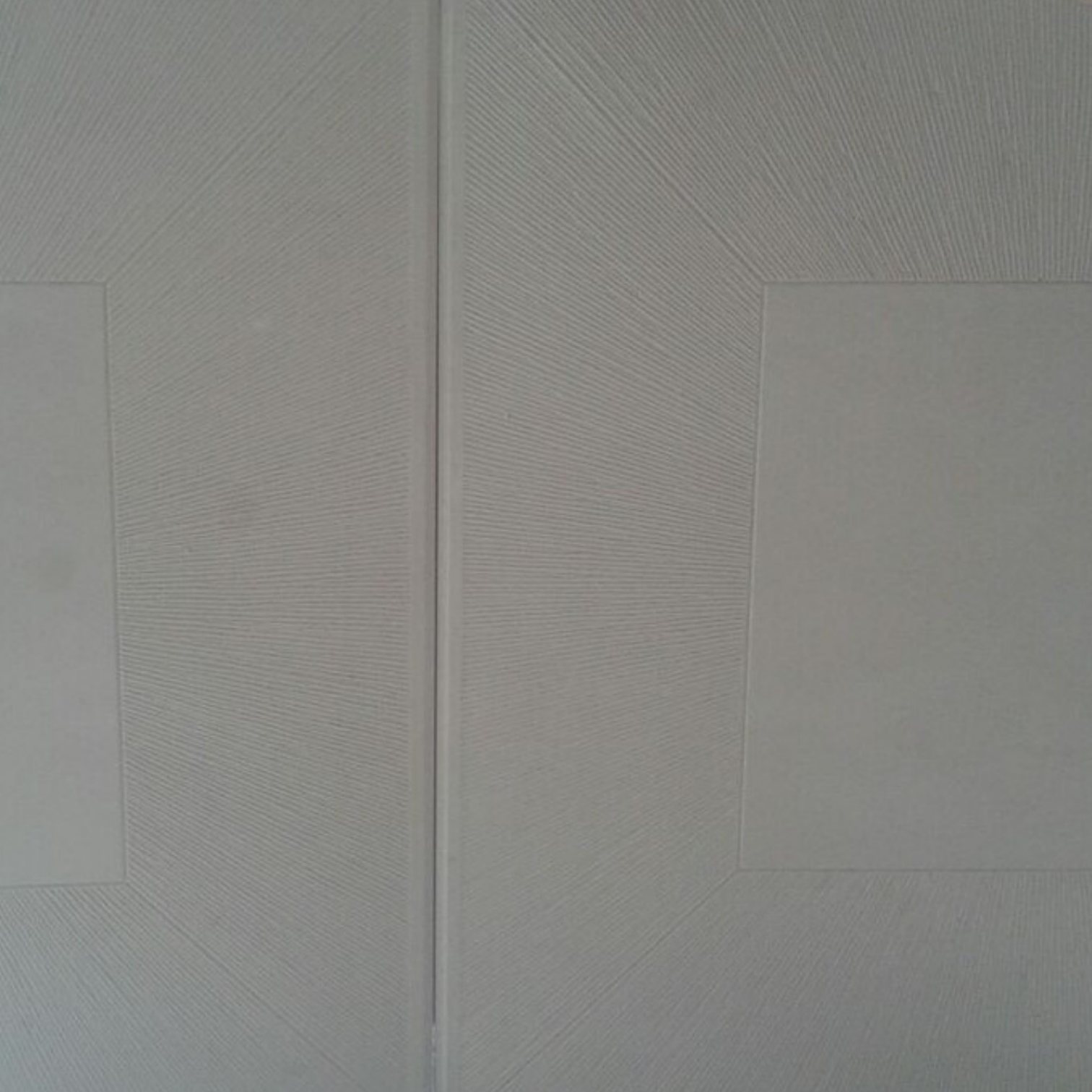
TechnoKontrol Fire Resistant Boards

We are proud to announce that we are able to provide one of the thinnest, safest and one of the most cost effective fire resistant boards currently available in today´s market. At present we are able to provide a board as thin as 13mm (1.3cm) that is able to withstand 1600C° for over 3 hours. At present our R&D team is working hard so as to improve both the thickness level (i.e. make an even thinner board) and to make it more durable (i.e. withstand even higher temperatures for a longer period of time).

As with all of our TechnoKontrol products, our Fire Resistant Boards are manufactured and can be tested by independent and nationally approved laboratories.

The TechnoKontrol Fire Resistant Boards are designed and built to suit any fire protection application. Its box cladding solutions allows for maximum utilization of the material and there is a limited to no clean up, waste or disposal of the product after use.

These plaster and exclusive VI generation alloy based boards are non-combustible, and can be cut/installed with standard wood-working tools. We can also customize our product so as to produce panels made of plaster or even wood via introducing our patented fire resistant product into the respective material.



Hence ensuring that our TechnoKontrol Boards can be used for various different types of jobs such as providing fire protection to

- Partitions & masonry walls
- Steel beams & columns
- Electrical & mechanical services enclosures
- Ductwork as well as ceilings.

Therefore we have produced the TechnoKontrol Boards so as you (our customer) will be able to meet all of your passive fire protection needs which may include one of the following:

- Protection for structural steelwork
- Pipes, cable and other service enclosures
- Ventilation fire rated duct
- Floors and ceilings
- Internal walls and partitions
- External walls
- Doors
- Enclosures
- Concrete structure protection
- Cavity barriers

As with all our TechnoKontrol products, the TechnoKontrol Boarding systems are easily installed and offer many additional features, some of which include:

- It can be installed at any temperature or in any weather condition
- It offers a superior performance with a drywall type finish
- It has been proven to offer an extremely high level of fire protection
- It is moisture resistant
- It offers a Zero clearance & has been proven to be impact resistant.
- It is built so as to provide the thinnest board possible within current regulations which in turn allows our TechnoKontrol Boarding system to offer a fire protection within the tightest of space requirements

TechnoKontrol Fire-Rated Floor and Ceiling Systems Provide Safety, Security and Strength.

National statistics show that a fire breaks out in a structure every 60 seconds and that the subsequent damages amount to more than 12 billion Euros a year.

Passive fire prevention products have been proven to stop the spread of fire and reduce the damage. Current construction codes within new buildings require that specific floors and ceilings must include what is known as fire separations. These are aimed to compartmentalize buildings thus, protecting them from the spread of fires and smoke.

Older buildings however were not necessarily built to the same code requirements of today hence; many managers are retrofitting their facilities in order to reduce the risk of the loss of life and property damage whilst in turn also benefiting from lower insurance premiums.


TechnoKontrol
WHERE YOUR SAFETY IS OUR PRIORITY
QSSHE
QUALITY SAFETY SECURITY HEALTH ENVIRONMENT
2017
TechnoKontrol
QSSHE
QUALITY SAFETY SECURITY
HEALTH ENVIRONMENT
2017

TK-QMSSHE/QSSHE GLOBAL CERTIFICATION

TK-QSSHE / TK-Quality Security Health & Environment
Standards for Construction Protection, Safety & Maximum Security Technologies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QUALITY SAFETY SECURITY HEALTH ENVIRONMENT
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QSSHE
QUALITY SAFETY SECURITY
HEALTH ENVIRONMENT
2017

TechnoKontrol has presented the new 2017 certificate, seal and logos for the TK-QSSHE Standards for Construction Protection, Safety & Maximum Security Technologies certification, especially designed for the construction, strategic, national security fuel-energy reserves and strategic infrastructures operators.

TK-Quality Security Health & Environment
Construction Industry Compliance Certification

Due to the increase of the terrorist risk in strategic locations, pipelines, fuel storage facilities, refineries, power stations, airports, seaports, TechnoKontrol has reached an agreement with many of the top European Operators, Government authorities, insurers and the security services to begin the issuance of the new TK-QSSHE Certification Directive in which the incorporated corporations, operators, establishments have or are in the process of protecting their operational assets including fuel storage, power plants with the recommended safety and security technologies to guarantee the maximum levels of protection for their guests, clients, employees and corporate assets.

The terrorist risk levels ever increasing due to the simple physical accessibility, low levels of fixed security protection standards, fabrication simplicity of homemade explosive devices,(I.E.D) which can be made with gas cylinders, petrol bombs and easily planted, activated, ignited in any hotel, shopping mall, airport fuel storage installations, which are all 100% refueled by fuel, gas, LNG, truck tankers.

Any truck fuel tanker, commercial fuel gas tank, fuel deposit with a normal capacity of 30,000 liters of fuels, LNG, heating gas, having in the event of an ignition, spark, armed attack, bullet shot, accident, a thermal, blast, fire, explosive and destruction range/power of a 200,000 TNT explosive and even the simple 30kg home gas cylinder having over 200 kilos of TNT blast.

TK-QSSHE Certificate

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TK-QSSHE STANDARDS FOR C
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Technokontrol certifies that the QSSHE Management Syster
protected with the most advanced Quality, Safety, Sec
accordance of the Safety and Security

Location	**City, Country**
Date	**01 January 2017**
Expiry Date	**01 January 2018**

C.E

(This company has been fitted with the most advanced safety and se
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+ Security Technologies

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CURITY TECHNOLOGIES

ms and Directives have been assessed and having installed, curity, Health & Enviroment (QSSHE) Technologies with y Directives issued by Technokontrol.

C.O. Chief Engineer

ecurity technologies to prevent the risk of energy, fuel, gas chemical, ional power installations in accordance with TK Safety and the NFPA ndard of Explosion Prevention 2014)Directives).

As these storage installations, deposits, fuel tanks being mostly in open air locations and next to the cities, towns, transport networks, public locations and services, industries, commerce the need of anti-explosive protection being paramount and using TechnoKontrol Safety Technologies allowing the full deactivation, null ignition or even non-explosion of these petrol chemical, national strategic networks and infrastructures, storage facilities regardless of the amount, type of the stored, used fuels, thus rendering any accidental or intentional incident null and fully protecting the population, employees, environment and the operators asset/establishment against these types of incidents.

The issuance and the certification will only be issued with full TechnoKontrol technical compliance and following top global USA & EU Safety, security and protection directives as set out by the USA-NFPA (National Fire Protection Association Codes 2008/2014 for the Prevention of Explosion Acts). All installations, services, maintenance programs and products being fully insured by Zurich Insurance.

TK-QMSSHE/QSSHE GLOBAL CERTIFICATION
STANDARDS FOR CONSTRUCTION PROTECTION,
SAFETY & MAXIMUM SECURITY TECHNOLOGIES

Certificates

DSEAR

HAZLOC

Architects
Engineers
Building
Officials
Section

JAA

CE

SOUTHWEST

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