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Products and services insured by



TechnoKontrol is a member of the







TK-Military Housing Construction Technologies

TK-Housing Projects® has the answer to all types of accommodation needs through an innovative system of modular prefabricated houses that represents the immediate future in the world of construction.

Thanks to our system we can assure our clients incredibly rapid terms on delivery and huge savings on costs and transport and an amazing timescale from order to a completed house.

alt Building and installation

Another advantage of our system is that we can build these homes, schools, hospitals with or without basic infrastructres as water, electricity, sewage, roads, etc.

Our buildings are custom made for each client or government and we only wish to produce a long lasting product with a long term quality guarantee which is paramount for Technkontrol's reputation as a global leader in the safety-security sector.

TK-Housing can adapt to any region, any terrain, to all conditions from building social housing in deserts to military bases in jungles or hospitals in city centres.









When access is difficult our houses can be built successfully and on almost any type of terrain and under any climatic conditions.

Our solid and well insulated modular houses have passed strict building and installation controls which ensure the guarantee of our construction system and we only manufacture in the European Union under full E.U Quality & Safety Standards.

We are always trying to increase our product portfolio and surpass our clients possible needs, thus using materials and designs which are essential to cover all possible present & future requirements from high heat exposure to extreme cold weather and in the worse scenario civil or military unrest regions where our bullet or blast proof safety materials are essential at civilian, industrial or military level.

All these benefits are all complimented by an efficient quality build and extreme building speed as at Technokontrol we know that time is an essential part of any project and many of our clients haven't the time to wait for a conventional long term build as their possible needs are to have "a roof over their heads" and not having the luxury to wait for months or years for a conventional home. Building and installation

When access is difficult our houses can be built successfully and on almost any type of terrain.

Our solid and well insulated modular houses have passed strict building and installation controls which ensure the guarantee of our construction system.

Characteristics

BUILDING AND INSTALLATION TIME

Fast construction
Process total of 6 hours
No need for highly skilled builders
Each component is easy to locate and identify

SECURITY

Tested against wind and earth tremors

Designs can be altered in height and roof angle to adapt to different locations and various climates. (Strong wind, rain, snow and extreme heat or cold)

LONG-LASTING

Reinforced steel structure

Quality materials

Exterior made with reinforced, galvanised steel laminates with superior insulation

External finishes super resistant to extreme weather conditions









LOW COST

Prefabricated houses with low cost advantage
High quality, low cost materials fabricated industrially
Competitive logistical prices
Easy to transport and store

TRANSPORTABLE AND REINSTALLABLE

The modular design of our constructions makes them easy to transport

Possibility to remove and relocate the construction after completion

Another outstanding characteristic of our houses is the super easy storage. The flat pack occupies a space of only 4×0.8 metres

The modules can be stored and built rapidly, should the need arise

QUALITY

Walls and roof with super quality insulation

Preinstalled electric wiring system

Plugs and switches preinstalled to a main fuse box

Installation of kitchen and bathroom fittings

Superior insulation provided by conventional materials. Independent laboratories tests have demonstrated the thermal and acoustic quality in our houses have obtained a higher level than conventional dwellings

ENVIRONMENTALY FRIENDLY

Zero impact on the environment
Suitable for any type of terrain
Designed following environmental codes
Possibility to make from completely renewable materials

GUARANTEE

Guarantee direct from Technokontrol on construction and installation









Construction System

Our prefabricated modules of 20 m² (2.80 m maximum height and 2.28 m minimum height) are ready to use or to be used as a base to extend and adapt.

The majority of the outside surface of the house is metallic. Each module is made up of different folding structures that pivot and allow the structure to be flat packed and ready for transport. Once opened on site, they form a solid, stable habitat that is then anchored into position.

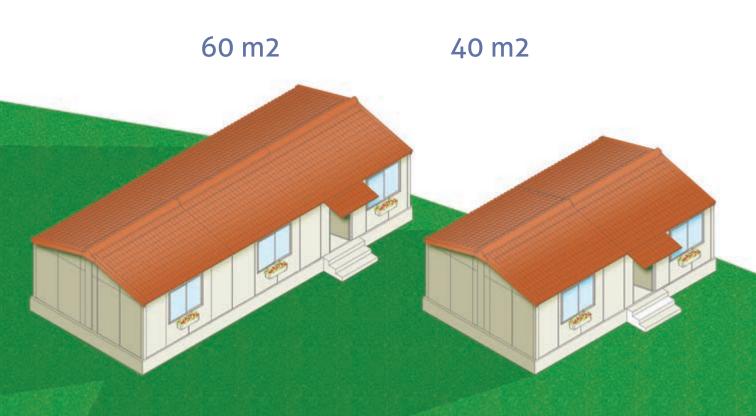
EXTENDING AND AMPLIFYING OPTIONS

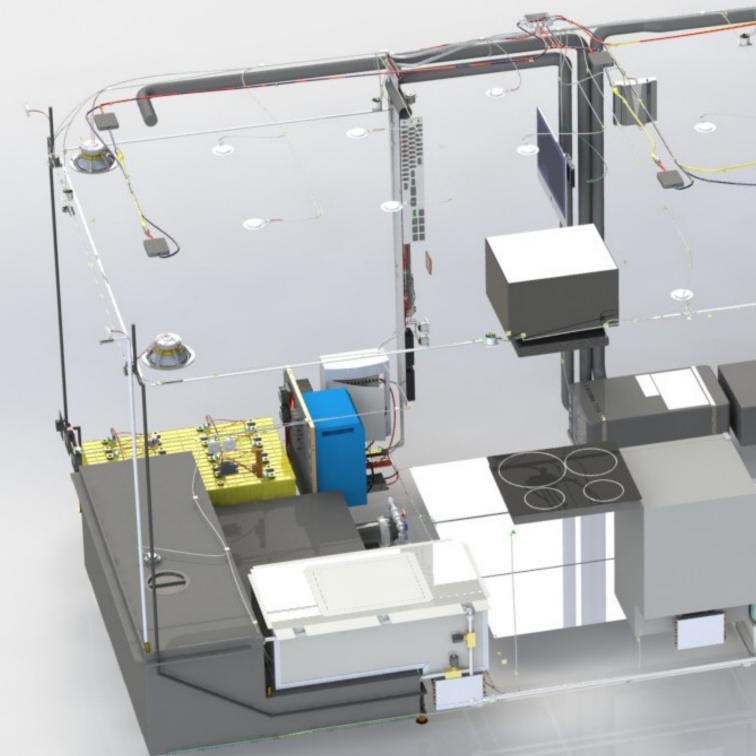
Another super advantage of our houses is the savings that can be made when choosing to amplify the modular.

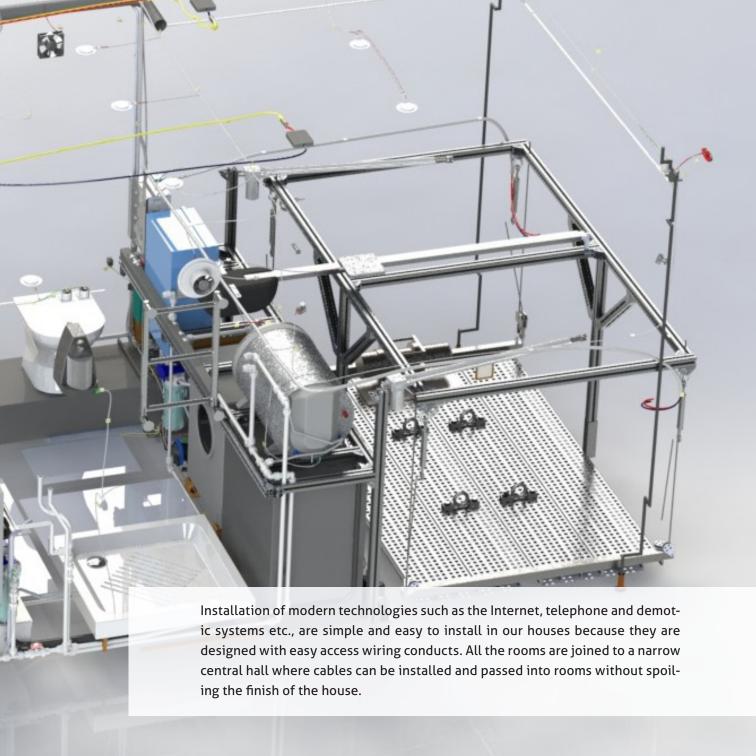
The houses are designed in individual modules that are guaranteed safe and stable no matter what the weather conditions.

As the family grows and more space is needed the solution is as simple as adding another modular and joining it to the original in the best position available. Depending on the needs of the family, the new annex might have to be accessible to the previous one and would require a skilled tradesman to complete this.

INNOVATIVE SYSTEM BASIC MODULAR CAN BE EXTENDED AND ADAPTED STRENGTH OF CONSTRUCTION







Building and Installation

1. Unpacking the Module

To reduce the transport costs, more than one unit can be delivered in each container. We can deliver of up to four units at a time, depending on the overall square metres of each unit ordered.

To unload the container, a crane/fork lift truck is needed using a chain to lift from the container and lower it onto the base where the module is to be built. Once the modules have been removed from the container they are easy to manage with a fork lift truck.

2. Locating

The first fitting phase is to fix the central part of the module to the base. The forklift should position the structure without unfolding any of the panels over the pre-drilled holes in the concrete base.

Once in place, the steel anchors that are provided can be introduced and washers are fitted and bolted into place. This completes the first central part of the build





3. Unfolding

The two roof panels can then be unfolded and lifted, the underside of which are the walls, there are rings that have to be located and pulled to allow the wall to be separated from the roof. The roof will continue to be movable until the walls are pushed out from under it.

The roof can then be provisionally held up by the walls until the lateral walls are unfolded and joined to make corners.

Next is to unfold and fit all the remaining parts that are required to finish the exterior and unfold and fit the internal walls.

4. Weather proofing and sealing

Once all the panels have been fitted into place we can begin sealing the joints with the rubber that is provided with the module and finished with silicone in places where there is a possibility of water entering.

Similar to the exterior, the interior has rubber moulds that are fitted into corners. The metal edges in the Cen- tre of the house are also covered with rubber and sealed with silicone to avoid humidity and draughts entering the module. Construction options





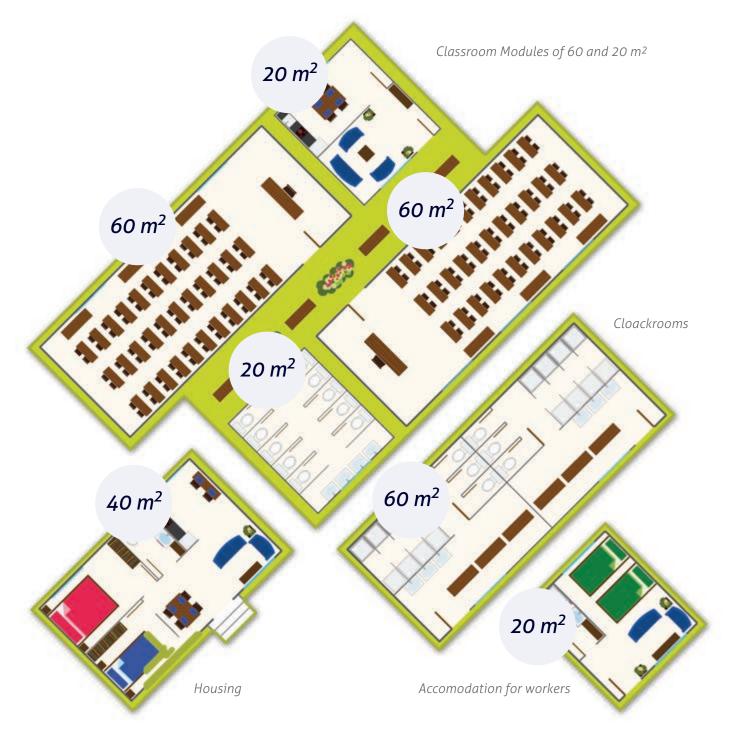


We have lots of solutions for every need possible in prefabricated housing. We can provide our clients with modules of 20, 35, 40, 55, 60, 75 even up to 200 m².

We can build any type of building from homes, company housing, military bases, schools, hospitals, offices, etc.

Images and specifications are for illustration purposes and may have to be altered for technical reasons.





Quality materials

The design of our houses has been made adhering to all international regulations.

Foundations

The dwelling can be constructed on stilts set in concrete or built on a readymade concrete foundation depending on the type of land and the clients' preferences.

External Walls

The external panels consist of two pre-painted steel laminates ST-37 with a thickness of 0.5/0.6 mm. Between the panels is polyuretane expanding foam with a density of 40 kg per m2, making the total external wall thickness 50 mm. The external finsh the depends on th clients' wishes. Internal walls are made of the same materials as the external and have a thickness of 30 mm.

Roof

Overlapping panels (which have previously been described) with a minimum thickness of 40 mm. The exterior side can be ordered in various types of finishes.









Heating

The materials used in our houses make them super insulated, warm and comfortable; however they are still designed to allow the installation of gas, electric, solar and other sources of heat. Optional Hot-Cold air conditioning units can be installed. Solar panel hot water and heating systems available.

TK Windows

Windows

The windows are ready lacquered in a white finish and open on side sliding runners. We can also offer double glazing, tinted glass, bullets proof or any other additional requirements.

Electric

The electrics are fitted in agreement with the electro technical code of low tension and complying with the rules of the supplying company. The system consists of various lines for sources of light and power. The general supply source is based in the entrance to the dwelling. The sockets and interrupters are high quality and match the colour of the interior walls. All the electric installations are designed to be hidden inside the internal walls.

Optional services as fire/smoke/gas /security alarm systems can be incorporated. Cold-Hot Air conditioning units can be installed in all rooms. Dust/sand filtering systems can be also incorporated.

Plumbing and Sanitation

The pipes and tubes are made from flexible PVC with different colours for different uses with quick fit PVC joints. The sanitation pipe is (110 mm, 50 mm and 40 mm) depending on the drainage system and goes directly into the wall. The PVC is joined with rubber to avoid leaks, humidity and odour.

Waste and clean water systems can be attached to the home in the event of non- connected sewage and water system available. These can be means of large clean filtered water tanks and underground sewage tanks which can maintained easily.

Doors

The doors are a bloc type. The interior doors are solid panels with a honey-comb centre and finished with prefabricated smooth sheet metal. Can be personalized to the customers requirements. Other specialist doors can be ordered which are for extreme weather.

Kitchen

The kitchen includes cupboards and storage below and above the stainless steel sink and taps that are prepared with a quick fit system that does not require skilled tradesmen. All additional kitchen appliances can be also incorporated as gas/electric cooker, stove, oven, microwave, fridge, freezer, washing machine, dryer, kitchen extraction system, gas/fire alarm, etc.









Optional products

1. TK Solar Panels

Hot water and electricity

Technokontrol can offer our clients many options and one of these is to install on the house roof a solar water heating system which will allow to have hot water for showers and for cooking. There is the possibility to incorporate an under floor water heating system or internal hot water radiators. (cold climatic regions). We can also install a combined water-energy solar panel system which will allow the home to have enough electricity to light the led lighting systems, air conditioning units and kitchen appliances. These options can be requested by the client and we can custom make each order depending on the projects climatic, technological and logistical needs.









2. TK Gas cylinders Cylinders and bottles

Technokontrol has a varied portfolio of anti-explosion safety gas tanks/cylinders. We can install our anti-explosion gas cylinder heating/cooking gas bottle/ cylinder in any home. These gas bottles/cylinders can be from the small 5 litre to the 26 litre units. In the event of having GNV (Autogas) our bottles can also be reconnected to be used as an alternative or even our TK-Alloy can be installed in the Autogas gas cylinders to protect against explosion, sabotage or terrorist attacks.

3. TK Wall systems Fire / Heat / Blast / Bullet proof

Technokontrol installs excellent quality materials and wall products. Many of our clients have specialist needs from a special double wall for heat or fire protection to the need to have bullet & blast proof walls and safety systems. Our TK-Blast technology can be installed as an optional package to protect the assets and employees / clients against terrorrist-sabotage attacks. Our Heat-wall panels can also reach and protect direct heat/fire blast for up to 3 hours at 1600° which is very important to have in petro-chemical installations due to the possible explosion or fire exposure in the event of an accident or direct sabotage or terrorist attack.





4. TK Safety alarms Fire / Gas / Smoke

At Technokontrol safety is paramount and we can offer our clients the benefits of using our exclusive gas/fire/smoke/safety alarms which can shut off gas automatically or detect smoke, fumes, unauthorized entries, etc which by means of a sounding and visual aide will indicate this situation to the client. Direct mobile connection for virtual live internet o mobile vision of the home when not present is also possible which will be connected to these above mentioned safety aides to make the home the most secure possible











Technokontrol has a large portfolio of products and services which depending on the product and its use in many occasions it can be directly purchased through our retail division ready for use as for example our TK-Anti Explosion Safety Fuel Cans and in other products as the TK-Anti Explosion Alloys for Home/DIY/Private/Motorsport. These simple products do not require high levels of technical backup or knowledge for its use or application, even though we at Technokontrol are available for our clients needs to advise in the event of any possible issues with regards to our products or their application.

"Safety is paramount and any question is better answered than a mistake occurring for not asking". On the other hand many other of our products and services due to their industrial and specialist application are complex and require high levels of technological knowledge with regards of the manufacturing and of their application and installation.

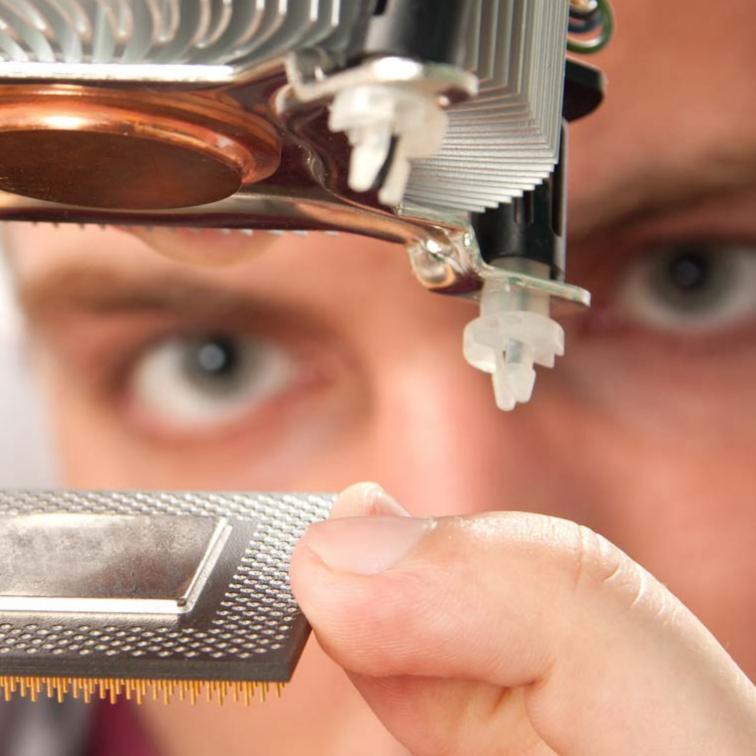












TK Global Servicing Services















TK-Ballistic Composite Panels

Applications

Mobile Shelters & Containers

Military/Law Enforcement Homes

Emergency Housing

Border Control Outpost

Petrol-Chemical Exploration/Extration Personnel Housing/Buildings

Hospitals & Medical Centres

School and Educational facilities

Logistics Bases

Military & law Enforcement Bases

Government Buildings

National Strategic Buildings

Banks & Financial Institutions

Mining Exploration/extraction Bases

Law Enforcement/Military Surveillance Bases

Spall Liner

Bulletproof Dry Walls

Safety Doors and Windows

Mobile Walls

Bunkers

Gatehouses

Shooting Ranges

Security Sections

Judges Benches

Jury Boxes

Bank Counters

Police and Government Buildings

TK- Ballistic Composite Panels can be used as stand alone armour or combined with other materials as additional protection. We provide different solutions according to required protection level. TK- Ballistic Panels are the optimal solution for cost effective bullet and blast protection.

TK-Ballistic Composite Panels are engineered to stop impacts through a special process, which ensures bullets and spalls are trapped inside the panels, in order to avoid that people or objects are hit by ricochets or small parts.

With combined panels

Test Bullet	weight (g)	velocity (m/s)
5,56 x 45	3,55	1000
7,62 x 39	8	730
7,62 x 51	9,5	830

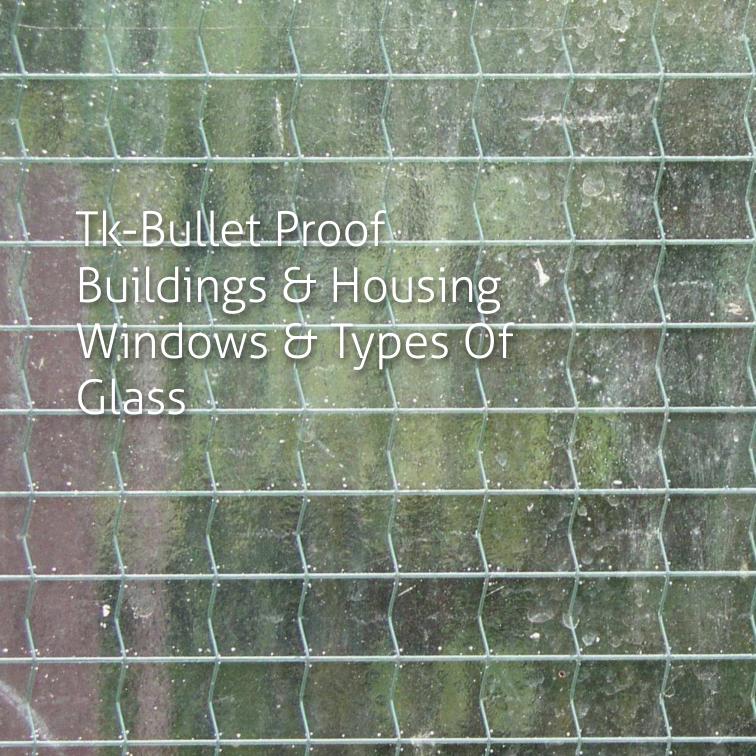














Defence Industry Windows & Glasses

With our experience and certificates of European origin, we provide services with perfectionist sense of manufacturing through the projects of the companies providing armored vehicles to defence industry and civil sector, which demands bullet proof glasses with international EN1063 (BR2-BR7) and Stanag4569 (LVL II-III) Standards.

We also manufacture on project basis with UL752 and NIJ standards, which are equivalent to these standards.

TK- Bullet Proof Glass, which continues to improve by integrating new technologies within sector with its manufacturing capabilities, manufactures glasses such as:

Polycarbonate and Polycarbonate-free Flat or Convex, Heated (microwires technology) With or Without Serigraph

Thanks to polycarbonate, in bullet proof glasses, such features as approximately 50% lightness and resistance to glass spalls are provided.







Working primarily with competitive price and speed delivery principles, TK-Bullet Porof Glass tries to protect its principles at maximum level, without compromising quality. It fulfills the designer and customer needs by maintaining its perfectionist philosophy in the production of special design flat, convex architectural and elevator glasses that are in pursuance of the projects. Polycarbonate and polycarbonate-free, flat or convex glasses, which are produced by means of TK-Engineering technology in the safety, security & construction sectors mainly. Thanks to polycarbonate, producing nearly 50% lighter glasses brings a static advantage, while your places are under protection with no spalling feature.



Flat or convex glasses

Laminated glasses Tempered glasses

Bullet proof glasses

Double-glazing applications

Antireflection glasses

Fire resistant glasses

Heated glasses

Impact resistant glasses

UV and sound insulated glasses

Safety & Security Construction Industry Windows & Glasses

TK-GLASS exercises extreme care to preserve our quality while primarily realizing our competitive price and rapid delivery principles in order to completely satisfy glass requirement in construction sector.

By maintaining our perfectionist philosophy in manufacturing of specially designed flat, convex architecture and elevator glasses, we continue our production in order to go beyond expectation of designers and our customers.





Tk-Bullet & Blast Proof Doors, Entries/Exits, Emergency Buildings/Bunkers

The TK-Bullet-Proof Technokontrol steel door prevents bullets from travelling through it. Its application areas include, protected housing, police/lsw enforcement buildings, safe rooms in airports and train stations, military bases, banks, court buildings, police cells in large arenas, but also private buildings which demand a high-level of security.

Bullet-Proof Steel/Material Door Tested in accordance with DIN EN 1522, Class FB 4 Depending on Project, building, Housing units.

DIMENSIONS

Width: 750 - 1500 mm

Height: 1750 - 3000 mm

Depending on Project, building, Housing units.







DOOR LEAF

Double-skinned, rebated on 3 sides

Door leaf thickness 64 mm

Sheet thickness 1.5 mm

Depending on Project, building, Housing units.

FRAME

Corner frame 2.mm thick, galvanized with 3-sided seal and bottom sill.

Frame fixed with 3 screws on each side

Depending on Project, building, Housing units.

SURFACE

Door leaf/Frame galvanized and prime coated similar to RAL 9002 (grey white)

Depending on Project, building, Housing units.

GLAZING

In accordance with DIN EN 1063-BR 4
Depending on Project, building, Housing units.

TK-Anti Fire/Heat/Thermal Panels, Walls & Exteriors

TK- Government buildings, Military & Law Enforcement Homes not only do they offer the protection of bullet proof, blast proof, they only offer due to thier building design and protection levels our unique TK-Anti Fire/Thermal/Heat Panels/ Walls which can surpass test levels of protection of over 1200C°-1600°C during more than 240 minutes if so required by the client.

We normally use a more normal protection standard TK- Fire Panel which can easily protect a building over the 60 minute period which we belive that in the event of any fire related incident is more than sufficient not only being protected from external fire but also during any sabotage or terrorist fire related attack.







In the case of exploration, extraction, petrol-chemcial, refinery plants we do recommend to use a more long term protection TK-Fire Panel to give that extra "Safety & Security" factor in the event of a fuel/gas/chemical related fire or explosion where damage can be extremly high and with our TK- Buildings already being bullet proof, blast proof and even fire and thermal proof giving these operational servicemen, employees, military & law enforcement personnel the best security and safety levels with the great advantage of being able to re-use, mobilze & transport these TK-Buildings in the future if so required by the government, authorities or corporations thus having a long term mobile opertational housing base program.

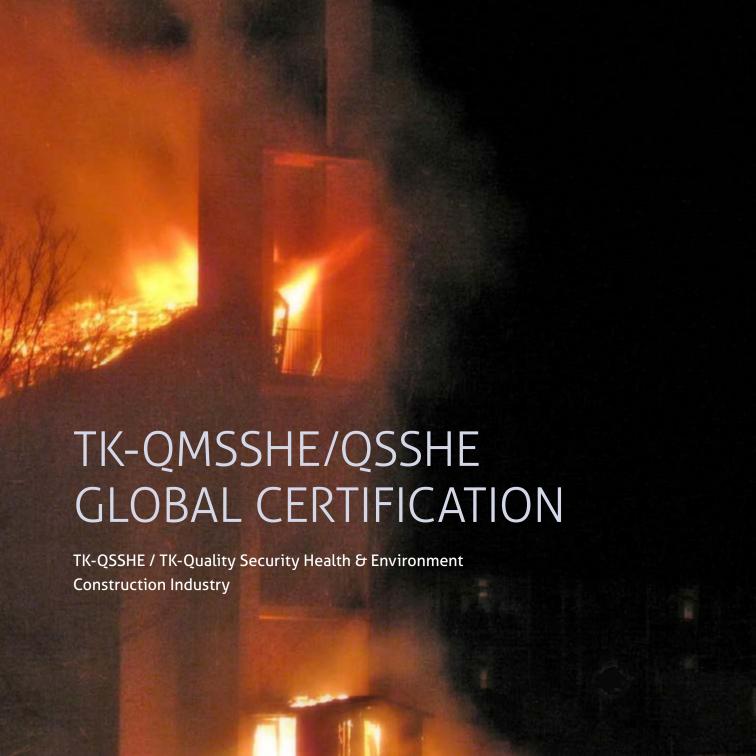
















QSSHE

QUALITY SAFETY SECURITY HEALTH ENVIRONMENT

2017





OSSHE QUALITY SAFETY SECURITY HEALTH ENVIRONMENT

2017



TechnoKontrol has presented the new 2017 certificate, seal and logos for the TK-QSSHE Construction 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.







Technokontrol Safety & Cert

C.E

TK-QSSHE STANDARDS FOR

Technokontrol certifies that the QSSHE Management System protected with the most advanced Quality, Safety, Secondarice of the Safety and Security

Location City, Country

Date 01 January 2017

Expiry Date **01 January 2018**

(This company has been fitted with the most advanced safety and se accidental, criminal/terrorist attacks in their fuel storage and operat (USA-National Fire Protection Association/ Star



Y IS OUR PRIORITY

Security Technologies

IY NAME CONSTRUCTION INDUSTRIES

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

.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 and 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 CONSTRUCTION INDUSTRY





Certificates



































































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TECHNOKONTROL

Ms. L. Cañada

C.E.O.

lcanada@technokontrol.com

Tel +(34) 698 893 269

SALES

Mr. David Doyle info@technokontrol.com

www.technokontrol.com

Ms. Sonia Martín

sales@technokontrol.com

Tel 902 002 805

Fax 902 002 806