Strongrooms and vaults

Demand for secure storage and archiving of documents, data, and valuables is on the rise due to new legislation as well as distributed and more sophisticated archiving needs. Not only financial institutions but also other organisations and businesses are increasingly required to store material securely – sometimes for days, sometimes for decades.

Archive and vault doors

Kaso archive and vault doors can be installed to a wall of reinforced concrete construction or as part of a prefabricated strongroom. They protect valuable assets against a wide variety of hazards including fire, unauthorised access and forced attacks. The range covers doors tested for varying grades of protection and provides an array of options in terms of emergency exits, locking, alarm sensors and exterior design.

Strongroom elements

Officially tested prefabricated strongrooms have replaced traditional concrete vaults in many banks, companies and institutions. Prefabricated strongrooms are also used in private panic room installations. The increase in their popularity is based on high security, consistent quality and certified burglary resistance. The strongroom scope of supply can also be customised to meet individual project requirements.

Safety deposit lockers

Kaso offers the widest range of standard safety deposit boxes in the market, with two series, SLK-70 and SLK-90, of which the latter has passed tests by the Bankers Association. Both series offer several standard width options and standard lockers. Thanks to a variety of locking options, design alternatives and additional monitoring and deposit management solutions, the deposit locker solution can be fully customised to meet specific needs.

Security rooms

EN 1143-1 Grades I and II
EI 60 Fire Resistance

Prefabricated light weight security and archive rooms are modern physical security solutions especially designed to office and public building installations. Light weight security panels are easily assembled by welding or bolting the elements for example if welding is not allowed. The loadbearing capacities of the building floors are also better utilized leaving more storing capacity to the security room. Prefabricated security and archive rooms are suitable for banks, companies and institutions. Prefabricated security rooms are even popular for private panic room installations.

Light weight security room panels are available with break-in resistance Grade I and II according to EN 1143-1 by ECB•S. The fire protection classification of the security room panels is 60 minutes. The fire protection level could be optionally increased with additional fire protection panels. Security rooms can be supplied with element floors or the elements could be also installed directly on top of existing floor. Surface finishing like painting or installation of decorative panels can be finalized by local contractors enabling the integration of the security room to the surroundings.

Security rooms are customized according to individual project requirements including for example:

- alarm, CCTV and access control systems
- mobile and fixed shelving systems
- additional fire insulation panels
- fire prevention and fighting systems
- bulletproof windows, elements or doors

Strongroom elements EH series

EN 1143-1 Grades I to XII

Supply options

Strongroom scope of supply is customised for meeting individual project requirements including for example:

- internal steel support structures for large/high or two-floor strongrooms
- alarm, CCTV and entrance control solutions
- safe deposit lockers
- emergency doors
- mobile and fixed shelves
- surface finishing options
- fire protection panels
- fire prevention and fire alarm solutions

Planning service

Kaso offers through international distributor network following services to customers, engineering offices and contractors:

- on-site estimates of prefabricated strongroom installation possibilities
- estimates of structural load bearing capacities
- strongroom planning assistance
- strongroom weight estimates
- cost estimates

The exterior measurements of Kaso prefabricated strongrooms can be entirely adjusted according to the customer and installation site requirements.

Installation

The prefabricated strongroom elements are delivered to the installation site where they are quickly assembled for immediate use. It is also possible to relocate a prefabricated strongroom if needed. In addition, the strongroom can be expanded and the vault door position can be moved.

Kaso strongroom advantages

The reason for high success for Kaso prefabricated strongrooms is based on:

- tested, comparable and certified burglary resistance
- high, stabile and monitored quality
- relocation possibility of the strongroom
- quality steel finishing on all sides of the elements
- flexible dimensioning
- possibility for reinforcing of existing security rooms
- quick and easy installation
- over 40 years experience with over 1000 strongrooms supplied internationally

Prefabricated strongroom elements

Officially tested prefabricated strongrooms have replaced traditional concrete vaults in many banks, companies and institutions. Prefabricated strongrooms are even popular for private panic rooms installations. The reason for high success for prefabricated strongrooms is based on high security, stabile quality and evaluated burglary resistance proofed by the certification.

Kaso offers wide range of prefabricated strongrooms and archive rooms tested and certified according to European Standard EN 1143-1.

Prefabricated elements are finished with high quality steel panels constituting of different barrier materials depending on the grade of burglary protection and optional explosion or fire protection resistance. Prefabricated elements are attached with indentations, making it extremely difficult to break the structure. The panels are secured by welding or by bolting where welding is not possible nor allowed. Strongrooms can be supplied with prefabricated element or steel plate floors. Surface finishing like painting or cladding can be finalised by local contractors.

Specifications

	Prefabricated strongroom elements with fire protection				Prefabricated high security strongroom elements with fire protection		Prefabricated high-security strongroom elements		
Model	**EH-1L**	**EH-2L**	**EH-20L**	**EH-30L**	**EH-50L**	**EH-60L**	**EH-90L**	**EH-100L**	**EH-120L**
Grade EN 1143-1	I	II	II	III	V	VI EX	IX EX CD	X EX CD	XII EX CD
Fire protection	EI60	EI60	EI120	EI60	EI60	EI60	-	-	-
Thickness (mm)	76	76	120	120	120	120	125	150	250
Weight (kg/m^2)	90	120	185	335	345	350	405	480	780

Strongroom elements EH series

EN 1143-1 Grades I to XII

Safe or panic rooms

A safe room or panic room is a fortified security room usually installed in private residences and business or public administration buildings.

The main object for security rooms is protecting the people of the premises against break in, home invasion and other threats.

Security room includes minimum prefabricated walls and door against break in, fire and even explosions. Optionally safety rooms could additionally include prefabricated ceiling and floor. Kaso safety room elements are available to break in classes I to XII according to European Standard EN 1143-1.

Security rooms can be hidden behind many household features, such as mirrors, wardrobes, bookcases, sliding bookcases.

Very often break in resistance of the building is simultaneously complemented with tested security doors (EN 1627) visually matching usual outside and entrance doors.

Security rooms usually contain communications equipment for emergency situations. Some safe rooms may also have externally vented ventilation systems.

There may also be able to monitor external security cameras and alarm systems. In basic safe rooms, a peephole in the door may be used for a similar purpose.

Safe rooms are typically equipped with basic emergency and survival items such as a flashlight, blankets, a first-aid kit, water, packaged food, self-defense tools, a gas mask, and a simple portable toilet.

Room view with entrance to the panic room behind the mirror

Panic room integration into the apartment.

Vault doors VD series

EN 1143-1 Grades I and II
EI 60 Fire Resistance

Security room doors

Break-in classification of standard security room doors is I or II according to EN 1143-1 by ECB•S. Fire classification of standard security room doors is 60 minutes.

Kaso security room doors are offering premium break-in resistance compared to standard industrial fire doors – four sided security construction including locking bolts on four sides and a dedicated, composite security barrier against multiple and modern forms of attack.

Security room doors are also supplied with high security locking mechanism including burglary certified high security locks. Security room doors are available with various locking and accessory options for specific security and operational requirements.

Optionally the security rooms could be supplied with standard industrial fire doors or bulletproof doors. Private panic rooms could be also supplied with decorated, conventional security doors enabling integration of the security room to the surroundings

Kaso Archive doors

VD-A is an archive door with 120 minutes fire protection (EI 120 fire rating). VD-A archive door offers premium burglary resistance compared to standard industrial fire doors – four sided security construction including locking bolts on three sides and fixed back bolt bank. Archive doors are also supplied with high security locking mechanisms including burglary certified locks. VD-A archive door is intended to be used with EH-20L and EH-30L archive rooms. Due to modern design, the archive door can be also installed to modern office environment.

Archive and Vault, strongroom door options

- lock-, bolt-, door micro switches
- preparation for alarm connection
- motor lock for entrance control
- electronic Paxos compact locking system
- mechanical combination or electronic code lock
- day gate
- door stopper
- seismic detector
- re-locking solution
- stainless steel design

Vault doors VD series

EN 1143-1 Grades II to XII
EI 120/ EI 60 Fire Resistance
(EH-20L to EH-60L models)

Kaso Vault doors

Kaso vault doors are burglary certified to gradesIII, V, VI, IX, X and XII according to European Standard EN 1143-1. Vault doors VD-3, VD-5 and VD-6 are also offering 120 minutes fire protection according to EI 120.

The doors can be used on their own, installed to the concrete wall or as part of prefabricated strongrooms. Vault doors can be also installed to offices where the look of a fire door does not match the rest of furnishings. Wide range of options are also available for Kaso vault doors for meeting the specific design and security requirements of the installations.

Standard equipment

Model	VD-A	VD-2	VD-3	VD-3L	VD-6	VD-9	VD-10	VD-12
Number of movable locking bolts	7	8	7	12	7	12	5 (large)	6 (large)
Fixed back bolt bank	yes	no	yes	no	yes	yes	yes	yes
Number of keylocks (Class)	1 (A)	1 (A)	1 (B)	1 (B)	2 (C)	2 (C)	2 (C)	3 (C)
Maximum number of locks	3	3	3	3	3	3	3	3
Burglary resistance	-	II	III	III	VI EX	IX EX CD	X EX CD	XII EX CD
Fire resistance (min)	120	60	120	-	120	-	-	-
Barrier/door thickness (mm)	120/193	62/124	120/193	62/124	120/193	154/224	220/285	300/365
Entrance W x H (mm)	898x1940	900x1940	898x1940	894x1936	898x1940	910x1960	910x1960	910x1960
Installation clearance W x H (mm)	1200x2150	1200x2150	1200x2150	1200x2150	1200x2150	1310x2170	1430x2220	1430x2220
Weight (kg)	320	320	450	400	800	1400	2000	2800
Colour light grey, RAL 7035	yes	yes	yes	yes	yes	yes	yes	yes

Vault doors with emergency doors

EN 1143-1 Grades III to VII

Kaso Emergency Doors

Emergency doors are installed as a secondary entrance to the vault. The emergency door enables strongroom access in case of operating failure of the main vault door and the vault operation can be continued until the main vault door has been repaired. Emergency Doors are manufactured to Grades III, V, VI and IX according to European Standard EN 1143-1 and are offering comparable security level as the main vault doors. Emergency door could be supplied with similar options as the vault doors for conveniency of operation.

The emergency doors can be used on their own, installed to concrete wall or as part of prefabricated strong-rooms as a secondary access. They can be also integrated to the main vault door for optimising the installa-tion area of the door on the walls and then maximising the storage capacity inside the vault. The outside entrance is also more conveniently arranged. The vault doors with integrated emergency doors are manufactured according to EN 1143-1. The external dimensions and passage/clearance of the vault doors with integrated emer-gency doors are the same as the standard vault doors without emergency doors.

Grill Gate with Integrated Emergency Grill Gate

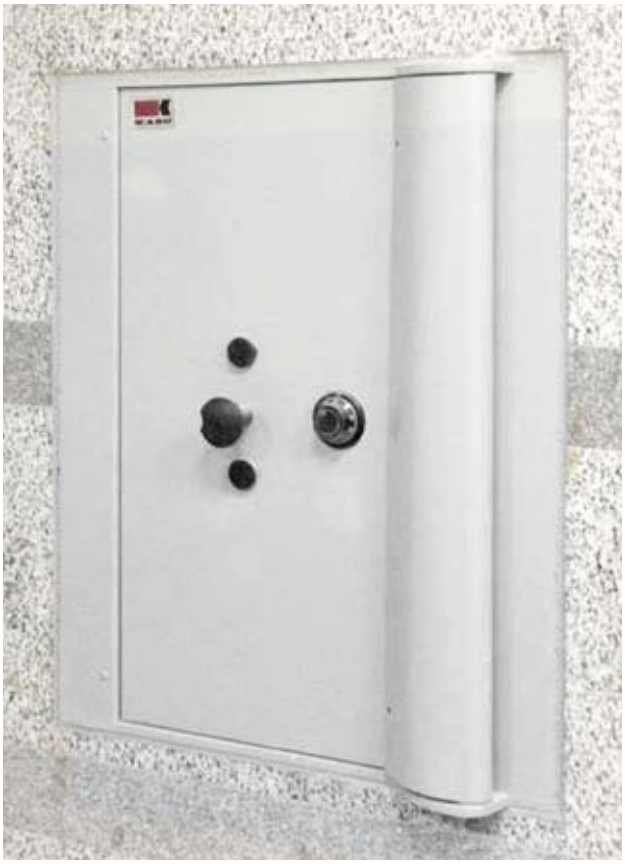
VD-3 Vault Door with Integrated Emergency Door

Standard equipment

Model	VD-3EL	VD-5E	VD-6E	VD-7E
Movable locking bolts (pcs)	12+12	7+8	7+8	7+8
Fixed back bolt bank	no	yes	yes	yes
Number of keylocks (pcs) (Class)	1+1 (B)	2+2 (B)	2+2 (C)	2+2 (C)
Maximum number of locks (pcs)	2+2	3+3	3+3	3+3
Manufactured to EN1143-1	Grade III	Grade V	Grade VI EX	Grade VII EX
Barrier/door thickness (mm)	62/124	120/193	120/193	120/193
Entrance W x H (mm)	894x1936, 464x464	898x1940, 502x852	898x1940, 600x1040	898x1940, 600x1040
Installation clearance W x H (mm)	1200x2150	1200x2150	1200x2150	1200x2150
Weight (kg)	450	700	800	850
Colour light grey, RAL 7035	yes	yes	yes	yes

Emergency vault doors

EN 1143-1 Grades II to VIII



Kaso emergency doors

- supplied with certified high security bank level locks and locking systems
- protection against latest and most advanced testing methods and tools
- specific protection for critical parts of the doors, locks and locking systems

Standard equipment

Model	VDE-3	VDE-4	VDE-5	VDE-6	VDE-7	VDE-8
Movable locking bolts (pcs)	8	8	8	7	7	6
Fixed back bolt bank	-	-	-	yes	yes	yes
Number of keylocks (pcs) (Class)	1 (A)	1 (B)	2 (B)	2 (C)	2 (C)	2 (C)
Maximum number of locks (pcs)	3	3	3	3	3	3
Manufactured to EN1143-1	Grade II	Grade III	Grade V	Grade VI EX	Grade VII EX	Grade VIII CD
Barrier/door thickness (mm)	62/125	62/125	94/156	120/193	120/193	155/225
Entrance W x H (mm)	502x852	502x852	502x852	600x1040	600x1040	650x1090
Installation clearance W x H (mm)	850x1090	850x1090	850x1090	910x1210	910x1210	1060x1310
Weight (kg)	120	120	170	340	340	700
Colour light grey, RAL 7035	yes	yes	yes	yes	yes	yes