





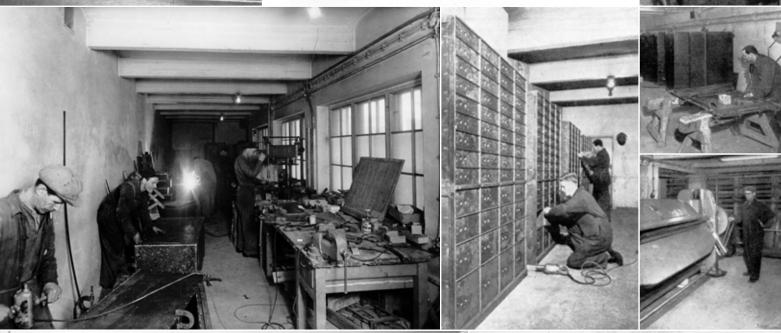


# TULI JA VARAS

saapuvat aina odottamatta!

#### KASSAKAAPPI

suojaa rahanne ja arvopaperinne näiltä kutsumattomilta "vierailta"







# Catalogue content

2

Fire protection for documents and data

8

Burglary protection 20

Keeps design safes

24

Cash handling solutions

30

Strongrooms and vaults

34

Strongroom and vault doors

38

Safe deposit lockers 40

Security doors 44

Clothes and locker cabinets



More information about Kaso security solutions. Please contact sales@kaso.fi or visit www.kasosafes.com.

# Fireproofed in real life building fires

At Kaso we often open safes damaged in fires around the world. Recently we opened a Kaso safe that had suffered in the forest fires in Greece. The house was burnt down to the stone wall.

Opening is always a thrilling and emo-

tional event – we cannot guarantee the state of the contents, if the conditions have exceeded what the safe is designed to withstand. This particular safe model was tested to withstand a heat of 1000 degrees for one hour,

but according to the owner, the safe had been at least 4-5 hours in above 700 degrees. This time the result made everyone happy: our customer was delighted with the good condition of stationery and keepsakes.













# Fireproof FC filing cabinets

NT Fire 017 – 60 Paper



FC-40, compact, with four drawers, without panel

#### Key features

- Modern design
- Lightweight filing series
- Fire protection 60 minutes (NT Fire 017 – 60 Paper)
- Two to four drawers
- · Adjustable filing rail width

#### Design

- Adjustable filing rail width
   suitable for A4, legal, letter,
  - foolscap folio paper sizes
  - Supplied with one central keylock on the top drawer
  - all drawers can be locked and opened with a single lock
- Colour light grey, RAL 7035

Specifications			
Model	FC-20	FC-30	FC-40
Height (mm)	785	1125	1470
Width (mm)	530	530	530
Depth (mm)	700	700	700
Weight (kg) C	146	202	260
Number of drawers	2	3	4

## Burglaryproof PK-400 fire safes

EN 14450 Grade S1 (ECB-S) NT Fire 017 – 120 Paper

#### Key features

- Over half a century of experience in tested fire security products
- Lightweight and modern fireproof storage solution for offices
- Modern design and wide range of models for a variety of storage needs
- 120 minutes fire protection according to NT Fire 017
  - 120 Paper (120 minutes of fire testing at temperatures over 1045 °C)
- Burglary protection S1 according to European Standard EN 14450 (ECB-S)
- Security locking system against burglary, theft and unauthorised access

#### Locking and security

- Four-way locking mechanism consists of sliding locking bolts on three sides and a locking frame structure on the back panel of the door
- PK-400 data safes are supplied with ECB-S certified Mauer keylock as standard – also available with various electronic code or combination lock models
- · Option for two locks
- · Floor anchoring

#### Optional fittings

- · Adjustable shelves
- Adjustable shelves with filing rails
- Lockable compartments external height 150 mm or 350 mm
- Pull-out multipurpose drawers and filing rails
- Data Insert MI-400
- · Gun accessories





# Burglaryproof PK-400 fire safes

EN 14450 Grade S1 (ECB-S) NT Fire 017 – 120 Paper







Specifications						
Model	PK-410	PK-420	PK-430	PK-440	PK-480	PK-490
External						
Height (mm)	680	1030	1380	1730	1730	1980
Width (mm)	670	670	670	670	1160	1220
Depth (mm)	580	580	580	580	580	580
Internal						
Height (mm)	490	840	1190	1540	1540	1790
Width (mm)	485	485	485	485	970	1040
Depth (mm)	360	360	360	360	360	360
Volume (I)	87	149	211	273	546	679
Weight (kg)	150	205	260	315	495	565
A4 file capacity (pcs)	6-9	12-18	18-27	24-36	48-76	65-100

## Burglaryproof PK-400 data safes

EN 14450 Grade S1 (ECB-S) NT Fire 017 – 120 Diskette

#### Locking and security

- Four-way locking mechanism consists of sliding locking bolts on three sides and a locking frame structure on the back panel of the door
- PK-400 data safes are supplied with ECB-S certified Mauer keylock as standard
  - also available with various other electronic code or combination lock models
- Option for two locks
- Floor anchoring

#### Tested protection

- Fire protection for data and media records according to NT Fire 017

   120 Diskette (fire protection for 120 minutes at temperatures of over 1045 °C), (PK-410 Data Safe NT Fire 017 – 90 Diskette)
- Burglary protection S1 according to European Standard EN 14450 (ECB-S)

#### Design

- Wide range of models and flexible adjustment of the inside fittings allows a variety of uses
- Sealed double door structure for maximum security against fire, heat, magnetism and water
- Standard colour light grey, RAL 7035

#### Optional inside fittings

- Adjustable shelves
- Pull-out multi-purpose drawers with dividers







Internal dimensions of a multipurpose pull-out shelf: PK-490 data safe 377 mm  $\times$  251 mm  $\times$  60 mm. Other models 344 mm  $\times$  251 mm  $\times$  60 mm.

# Burglaryproof PK-400 data safes

EN 14450 Grade S1 (ECB-S) NT Fire 017 – 120 Diskette













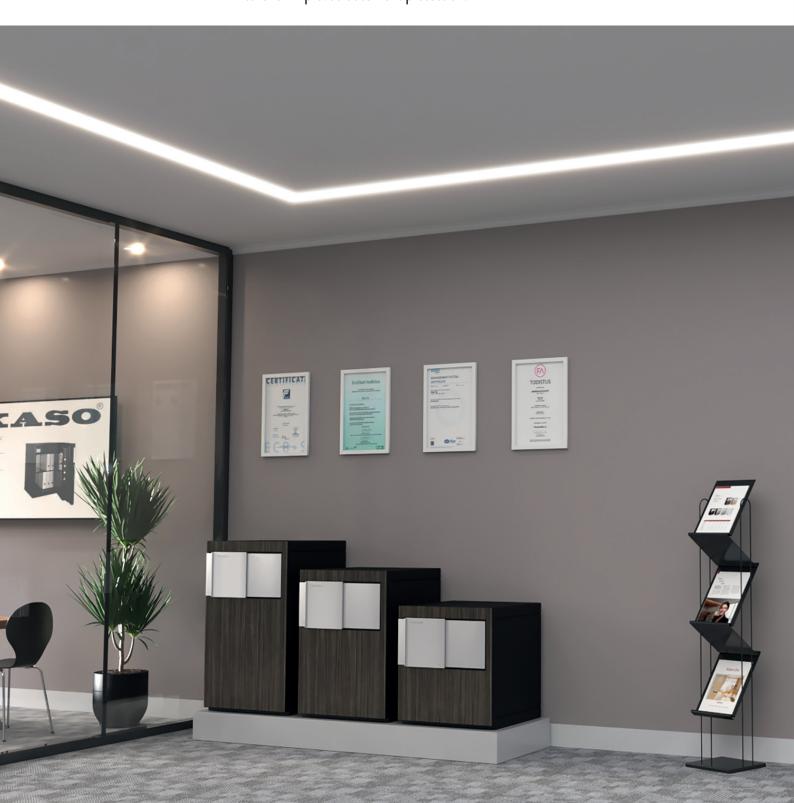
Specifications						
Model	PK-410 DATA SAFE	PK-420 DATA SAFE	PK-430 DATA SAFE	PK-440 DATA SAFE	PK-480 DATA SAFE	PK-490 DATA SAFE
External	DATA SAFE	DAIA SAFE	DAIA SAFE	DATA SAFE	DAIA SAFE	DAIA SAFE
Height (mm)	680	1030	1380	1730	1730	1980
Width (mm)	670	670	670	670	1160	1220
Depth (mm)	580	580	580	580	580	580
Internal						
Height (mm)	390	740	1090	1440	1440	1690
Width (mm)	375	375	375	375	755	815
Depth (mm)	260	260	260	260	260	260
Volume (I)	39	73	108	142	284	361
Weight (kg)	170	230	300	380	625	725
Capacity (estimate), discs						
5.25" magneto-optical disc	95	185	280	415	830	920
CD/DVD	160	315	470	705	1405	1640
Zip drives	190	380	570	760	1515	2355
3.5" magneto-optical disc	390	905	1290	1810	3615	5505
Capacity (estimate), cartridges						
DLT	90	180	270	360	720	900
LTO, LTO Ultruim	110	220	325	435	865	1345
Exabyte 8 mm, Travan TR-4	195	390	585	780	1560	1820
AIT	310	615	920	1225	2450	3025
DAT	310	715	1020	1430	2860	3810
DDS	435	1010	1440	2020	4035	4995

 $Pull-out\ multipurpose\ drawer\ inner\ dimensions\ (mm):\ width\ 340\ x\ depth\ 250\ (models\ PK-410-PK-480),\ width\ 375\ x\ depth\ 250\ (model\ PK-490).$ 

Data safe capacity estimates are assuming adjustable shelves as internal accessories. Individual data cartridge package sizes are manufacturer specific. More information from sales@kaso.fi.

# Burglary protection

More and more mobile employees, temporary personnel and visitors pass through office environments and shops. The increase in traffic calls for improved document protection.





#### Eurosafes

The multi-layer BFP® construction, developed by Kaso, provides invaluable benefits for the construction of safes. Thanks to the innovation, the Kaso E-400 Eurosafe series offers significant weight savings without compromising the security level. The locking mechanism of the E-400 series safes consists of sliding locking bolts on three sides and a locking frame structure on the back panel of the door. The safes are supplied with a floor-anchoring hole and bolt as standard to prevent easy removal of the safe.

#### Fire- and burglaryproof Eurosafes

The Kaso E-300 series provides strong burglary protection and tested fire protection for 60 minutes. The variety of safe sizes, with container volumes ranging from 87 to 635 litres, ensures a precise match for customer-specific needs. Door panel, colouring and inside fitting options further add to the versatility of the series.

#### Office safes

Kaso office safes of the PTK-300 series are available in six sizes. The light and slender construction allows for flexible placement in the office – the smallest of the series can even be placed under a desk. Sliding bolts on all four sides of the door protect the contents against unauthorised access and keep the door tightly closed against fire. All safes in the series can be floor-anchored and equipped with a variety of locking options and inside fittings.

#### **Eurosafes E-100 series**

EN 1143-1 Grade I (ECB-S)

ECB-S certified and practical Eurosafe for small shops, restaurants, kiosks, offices and homes.

#### Standard options

- Unpickable keylock, EN 1300 Class A (2 keys)
- Standard colour Dusty Grey, RAL 7037
- Back wall and floor anchoring (1 anchoring bolt)
- Adjustable shelf



#### Locking options

• Digital codelock



Specifications			
Model	E1-103	E1-104	E1-106
External			
Height (mm)	280	395	565
Width (mm)	450	450	450
Depth (mm)	442	442	442
Internal			
Height (mm)	230	345	515
Width (mm)	400	400	400
Depth (mm)	310	310	310
Volume (I)	29	43	64
Weight (kg)	85	100	130

#### **Eurosafes PTK E-300 series**

EN 1143-1 Grade 0 to IV (ECB-S) NT Fire 017 – 60 Paper (Grade 0 to III) EN 15659 – LFS 30 P (Grade IV)

#### Key features

- Designed for offices
- Burglary tested and certified according to Euronorm EN 1143-1 Grade 0 to IV (ECB-S)
- Fire protection for 60 minutes according to NT Fire 017
   60 Paper (Grade 0 to III)
- Fire protection for 30 minutes according to EN 15659 – LFS 30 P (Grade IV)
- Unpickable keylock with two changeable keys as standard (E4 grade with two locks)
- Wide range of locking options and accessories
- Standard colour light grey, RAL 7035
- Easily installed the smallest size can even be placed under a desk
- Sliding bolts on all four sides of the door protect against burglary attack and keep the door tightly closed in case of fire
- Floor anchoring as standard
- Internal fittings adjustable at 25 mm pitch
- · Light weight, all under 1000 kg

#### Options and fittings

- Combination lock or electronic codelock
- · Option for two locks
- · Adjustable plain shelf
- · Pull-out multi-purpose shelf
- · Pull-out suspension file frame
- Pull-out worktop
- Lockable inner box
- Data Insert MI-400
- Pull-out keyrack
- Pull-out key compartment shelf
- · Pull-out key shelf
- Full RAL range available for colouring
- · Right or left handed opening
- Safety deposit lockers









# **Eurosafes PTK E-300 series**

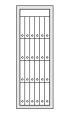
EN 1143-1 Grade 0 to IV (ECB-S) NT Fire 017 – 60 Paper (Grade 0 to III) EN 15659 – LFS 30 P (Grade IV)

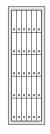


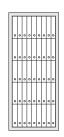












Specifications						
Model PTK-SERIES	E-310 E1-310 E2-310 E3-310 E4-310	E-320 E1-320 E2-320 E3-320 E4-320	E-330 E1-330 E2-330 E3-330 E4-330	E-340 E1-340 E2-340 E3-340 E4-340	E-350 E1-350 E2-350 E3-350 E4-350	E-370 E1-370 E2-370 E3-370 E4-370
External						
Height (mm)	612	962	1312	1662	1912	1912
Width (mm)	634	634	634	634	634	848
Depth (mm)	550	550	550	550	550	692
Internal						
Height (mm)	493	843	1193	1543	1793	1793
Width (mm)	486	486	486	486	486	700
Depth (mm)	364	364	364	364	364	506
Volume (I)	87	149	211	273	317	635
A4 file capacity (pcs)	6-9	12-18	18-27	24-36	30-45	40-70
Weight (kg) E/E1	180	260	340	420	470	650
Weight (kg) E2	220	300	390	470	500	750
Weight (kg) E3	250	340	430	530	580	850
Weight (kg) E4	280	380	490	610	670	970

#### **Eurosafes PTK E-300 series**

EN 1143-1 Grade II to III (ECB-S) NT Fire 017 – 60 Paper

#### Key features

- Burglary tested and certified according to Euronorm EN 1143-1 Grade II to III (ECB-S)
- Fire protection for 60 minutes according to NT FIRE 017
   60 Paper
- Wide range of locking options and accessories
- Standard colour light grey, RAL 7035

#### Options and fittings

- Combination lock or electronic lock
- Two locks
- · Adjustable plain shelf
- Pull-out multi-purpose shelf
- Pull-out suspension file frame, size A4
- Lockable inner box
- · Other RAL colours











Specifications		
Model PTK-SERIES	E2-308 E3-308	E2-309 E3-309
External		
Height (mm)	612	789
Width (mm)	570	570
Depth (mm)	500	500
Internal		
Height (mm)	493	670
Width (mm)	428	428
Depth (mm)	314	314
Volume (I)	66	90
A4 file capacity (pcs)	5-8	10-16
Weight (kg) E2	190	260
Weight (kg) E3	210	290

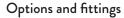
#### Eurosafes E-300 series



EN 1143-1 Grade II to III (ECB-S) NT Fire 017 – 60 Paper

#### Key features

- Burglary tested and certified according to Euronorm EN 1143-1 Grade II to III (ECB-S)
- Fire protection for 60 minutes according to NT FIRE 017 - 60 Paper
- Wide range of locking options and accessories
- Standard colour light grey, RAL7035
- Standard wooden door panel graphite grey



- Combination lock or electronic lock
- Two locks
- Adjustable plain shelf
- Pull-out multi-purpose shelf
- Pull-out suspension file frame, size A4
- Lockable inner box
- Other RAL colours





Specifications		
Model E-300-SERIES	E2-308 E3-308	E2-309 E3-309
External		
Height (mm)	612	789
Width (mm)	570	570
Depth (mm)	560	560
Internal		
Height (mm)	493	670
Width (mm)	428	428
Depth (mm)	314	314
Volume (I)	66	90
A4 file capacity (pcs)	5–8	10-16
Weight (kg) E2	210	260
Weight (kg) E3	220	300





#### Eurosafes E-300 series

EN 1143-1 Grade 0 to IV (ECB-S) NT Fire 017 – 60 Paper (Grade 0 to III) EN 15659 – LFS 30 P (Grade IV)

#### Key features

- Burglary tested and certified according to Euronorm EN 1143-1 Grade 0 to IV (ECB-S)
- Fire protection for 60 minutes according to NT Fire 017
   60 Paper (Grade 0 to III)
- Fire protection for 30 minutes according to EN 15659 – LFS 30 P (Grade IV)
- Standard colour light grey, RAL 7035
- Standard wooden door panel graphite grey

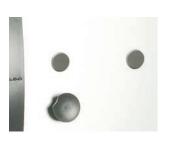






# CHEASO





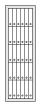
E-300 Eurosafe with two locks













Specifications						
Model	E-310	E-320	E-330	E-340	E-350	E-370
E-300-SERIES	E1-310	E1-320	E1-330	E1-340	E1-350	E1-370
	E2-310	E2-320	E2-330	E2-340	E2-350	E2-370
	E3-310 E4-310	E3-320 E4-320	E3-330 E4-330	E3-340 E4-340	E3-350 E4-350	E3-370 E4-370
External	L+-510	L <del>4</del> -320	L <del>1</del> -330	L-T-J-T0	L <del>4</del> -330	L <del>4</del> -3/0
Height (mm)	612	962	1312	1662	1912	1912
Width (mm)	634	634	634	634	634	848
Depth (mm)	610	610	610	610	610	752
Internal						
Height (mm)	493	843	1193	1543	1793	1793
Width (mm)	486	486	486	486	486	700
Depth (mm)	364	364	364	364	364	506
Volume (I)	87	149	211	273	317	635
A4 file capacity (pcs)	6-9	12-18	18-27	24-36	30-45	40-70
Weight (kg) E0/E1	190	270	360	440	490	680
Weight (kg) E2	230	310	400	480	520	780
Weight (kg) E3	260	350	450	550	600	880
Weight (kg) E4	290	390	510	630	690	1000

#### Eurosafes E-300 series

EN 1143-1 Grade 0 to IV (ECB-S) NT Fire 017 – 60 Paper (Grade 0 to III) EN 15659 – LFS 30 P (Grade IV)

#### Options and fittings

- Varos keylock with changeable keys
- Electronic codelock
- · Mechanical combination lock
- · Panel options and special colours
- · Adjustable plain shelves
- Pull-out multi-purpose shelves
- Pull-out worktop
- · Lockable inner boxes
- Data Insert MI-400
- · Pull-out keyrack
- Pull-out key compartment shelf
- Pull-out key shelf
- Pull-out suspension file frame
- · Tested deposit solution
- · Safety deposit lockers

#### Eurosafes E5-300 series

EN 1143-1 Grade V (ECB-S) NT Fire 017 – 60 Paper

#### Key features

- Certified according to Euronorm EN 1143-1 Grade V (ECB-S)
- Fire protection for 60 minutes according to NT Fire 017
   60 Paper
- Equipped with two Class B (ECB-S) Varos keylocks as standard
- Wide range of locking options and accessories
- Standard colour light grey, RAL 7035

#### Options and fittings

- · Adjustable plain shelf
- · Pull-out multi-purpose shelf
- · Pull-out worktop
- Lockable inner boxes
- Pull-out keyrack
- · Pull-out key shelf
- · Pull-out suspension file frame
- Safety deposit lockers
- · Right- or left-handed opening

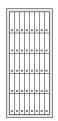












Specifications					
Model	E5-320	E5-330	E5-340	E5-350	E5-370
External					
Height (mm)	1017	1367	1717	1970	1970
Width (mm)	710	710	710	710	920
Depth (mm)	630	630	630	630	770
Internal					
Height (mm)	840	1190	1540	1790	1790
Width (mm)	486	486	486	486	700
Depth (mm)	364	364	364	364	506
Volume (I)	149	211	273	317	635
A4 file capacity (pcs)	12–18	18-27	24-36	30-45	40-70
Weight (kg)	650	850	1040	1200	1440



Adjustable plain shelf



Pull-out drawer



Pull-out worktop



Data Insert MI-400



Key insert



 $Pull-out\ key\ compartment\ drawer$ 



Pull-out key drawer



Pull-out filing frame



Lockable inner cabinet 350 mm



Tested deposit system



Gun accessories

# Keeps design safes

Our new E-500 series safes combine contemporary Scandinavian design – simplicity, minimalism and functionality – with cutting-edge technology.

In addition to great looks, we also wanted the new E-500 range of safes to be as easy to use as possible. Just enter the code and open the door. To lock the door, you don't need to touch the handle. Push the door closed and the safe is locked.

# It takes more than welding sheets together

Kaso's innovative, lightweight multi-layer BFP-Construction® enables manufacturing of light-weight safes without compromising the security level. Weight range of 200 to 340 kilograms means that E-500 series safe can be placed practically anywhere. Safes can be anchored either to the floor or to the wall. Three sizes and two levels of burglary protection meet every need.

#### Tailormade to your requirements

Standard front panels are smoky brown pear and maple, but other options are available upon request. Should you wish to fine tune the style even further from the stock colours black or white, you can order the safe body painted any RAL colour you desire. Also a variety of optional accessories is available to meet your storage requirements.



# Keeps design safes E-500 series

EN 1143-1 grade EURO II and III (ECB-S) NT Fire 017 - 60 Paper

#### Strength with beauty

· Scandinavian design with bank security

#### Light weight

Possible to install to every office and home

#### Easy to use

Enter the code and open the door.
 To lock the door, just push the door closed and the safe is locked.

#### Optional accessories

- · Watch winders
- Lockable inner cabinet
- · Pull out drawer
- Hideaway shelf for secret papers
- · Adjustable metal or glass shelf
- Glass plate on top of the safe















#### Standard panels

- · Smoky brown pear
- Maple

#### Standard body colour

- Black
- White

#### Examples of other panel options

- Wenge panel
- · Aluminium panel
- · Colour painted RAL 9006
- · Colour painted RAL 9003



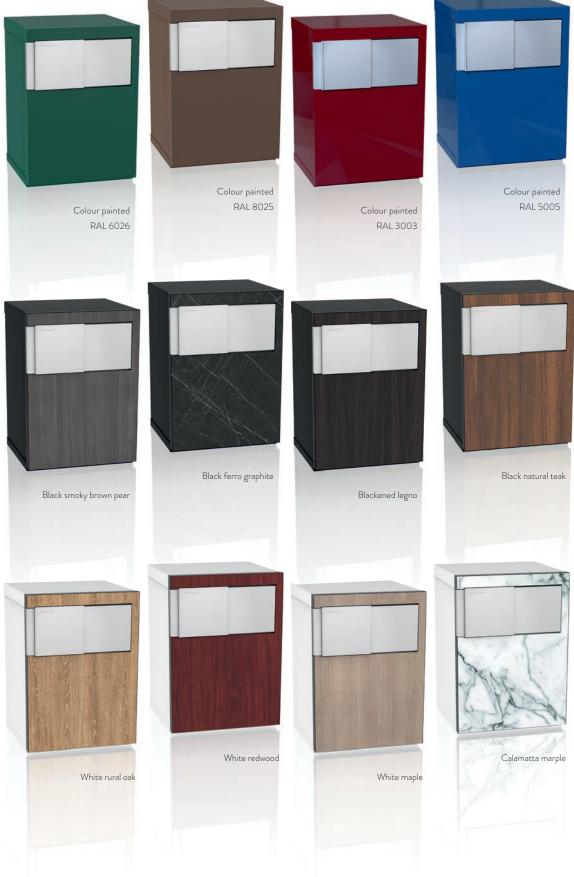
Smoky brown pear

Maple



Specifications						
Model	E2-507	E3-507	E2-508	E3-508	E2-509	E3-509
External						
Height (mm)	610	610	790	790	940	940
Width (mm)	560	560	560	560	560	560
Depth (mm)	565	565	565	565	565	565
Internal						
Height (mm)	490	490	670	670	820	820
Width (mm)	440	440	440	440	440	440
Depth (mm)	310	310	310	310	310	310
Volume (I)	68	68	94	94	114	114
Weight (kg)	200	230	240	280	300	340

# Examples of design options





# Cash handling solutions

Large volumes of notes, coins and receipts as well as other valuable assets such as keys are handled in shops, service points, offices and banks every day. Securing their safety calls for robust yet functional transit and storage applications.

#### Temporary cash storage

For cash handling and temporary storage, Kaso KLE-40 cashier boxes offer a convenient yet secure solution. The handles make it easy to move the box into a storage safe when not in use. Alternatively, it can be securely anchored on a desk.

#### Drop and deposit safes

Adjustable for a range of deposit requirements, Kaso E-400 series drop safes offer a flexible deposit solution for shops, restaurants, banks and cash-service companies. The solution allows for multiple-size deposit packages and variable security levels. A number of locking, compartment and internal fittings are available for customisation according to customer-specific needs.

Kaso PTK-E300 deposit safes are specially designed for use in retail outlets and other environments where money should be stored at all times in a tested safe. With Kaso PTK-E300,

the amount of cash at cashier's desks and service points can be kept to a minimum, which significantly lowers the risks for robbery or hold-ups. The system is designed so that service personnel will not need keys or codes using the deposit. The solution offers a variety of optional features and inside fittings.

Kaso Cinema, a tailor-made surveillance and alarm system, is available for drop and deposit safe solutions for usage monitoring and documentation. The success of the drop is verified by cameras recording every step of the deposit.

#### Cashier lockers PKL series



#### Standard options

- 8, 12 or 16 pcs 100 mm lockers, (inc. bottom plate 200 mm and top plate 35 mm)
- Wall thickness 1.5 mm
- Abloy Sentry keylocks
- Locker numbering
- · Colour light grey, RAL 7035

#### Available options

- Lockable rear-door
- Special locker sizes
- · Special finishing of the lockers

Specifications			
Model	PKL-8	PKL-12	PKL-16
Height (mm)	1035	1435	1835
Width (mm)	453	453	453
Depth (mm)	450	450	450



#### Cash deposit box VL-180

- · For temporary surplus cash deposit
- Fishing prevention
- Keylock or electronic codelock with time-delay
- Guiding plate
- · Installation plate

## Cash deposit box

VL-180

Specifications	
Model	VL-180
Height (mm)	300
Width (mm)	180
Depth (mm)	310
Weight (kg)	8.5

## Deposit safes PTK E-300 series

EN 1143-2 Grade III

#### Key features

- Designed to provide high-security deposit safety in retail outlets and service points
- Certified according to European Standard EN 1143-2 to Grade III
- · Specially designed against manipulation
- Floor-anchoring for additional security against removal of the safe
- Limited access to contents of the safe
   deposit customers have no access
   into the safe
- Standard colour light grey, RAL 7035
- Maximum deposit bag size:
   45 mm (H) x 235 mm (W) x 155 mm (D)
- · Right- or left-handed opening
- · Rear- or front-facing deposit





#### Options and fittings

- The safes can be equipped with electronic code locks or combination locks
- · Option for two locks
- Deposit drawer keylock
- Kaso Cinema, camera-monitoring solution for user and deposit process verification
- Lockable compartments, shelves and other internal fittings



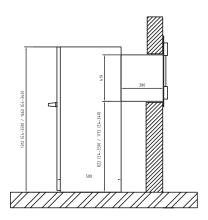


Specifications			
Model	PTK E3-310 DP	PTK E3-320 DP	PTK E3-330 DP
External			
Height (mm)	912	1262	1612
Width (mm)	634	634	634
Depth (mm)	550	550	550
Internal			
Height (mm)	493	843	1193
Width (mm)	486	486	486
Depth (mm)	364	364	364
Volume (I)	87	149	211
Weight (kg) Grade III	490	580	670
Deposit drawer height (from bottom)	762	1112	1462

## Night deposit safes PTK E-300 series

EN 1143-2 to Grade N-IV (ECB-S)









#### Key features

- Specially designed for banks
- 24-hour surplus cash depositing
- Night deposit safes are tested according to European Standard EN 1143-2 to Grade N-IV (ECB-S)
- · Also security grade V available
- · The safe has two Varos keylocks
- Floor-anchoring
- Armoured installation frame for easy mounting, wall thickness up to 350 mm
- Lightweight solution thanks to Kaso's BFP® construction
- Easy and fast assembly to the outside wall with stainless steel faceplate
- Stainless steel faceplate
- Deposit cover lock Abloy Classic with 10 keys for deposit customers
- Anti-fishing mechanism
- Standard colour, RAL 7035
- Deposit trap 70 mm (H) x 180 mm (W) x 100 mm (D)

#### Options and fittings

- The safes can be equipped with electronic codelocks, combination locks or keylocks
- · Special grill gate for explosion protection
- Kaso Cinema, camera-monitoring solution for user and deposit process verification
- Optional solutions for deposit verification and security
- Lockable compartments
- Internal fittings and accessories

Specifications			
Model	E4-320N	E4-330N	E4-340N
External			
Height (mm)	962	1312	1662
Width (mm)	634	634	634
Depth (mm)	550	550	550
Internal			
Height (mm)	843	1193	1543
Width (mm)	486	486	486
Depth (mm)	364	364	364
Volume (I)	149	211	273
Weight (kg)	500	610	730
Deposit trap height mm (from bottom)	720	1070	1420

# 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-60L	EH-90L	EH-100L	EH-120L
Grade EN 1143-1	I	Ш	П	III	VI EX	IX EX CD	X EX CD	XII EX CD
Fire protection	EI60	EI60	EI120	EI60	El60	-	-	-
Thickness (mm)	76	76	120	120	120	125	150	250
Weight (kg/m²)	90	120	185	335	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 (El 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 El 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 equip	ment							
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- entrance 896 x 1936	yes	-	yes	-	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	896x1936	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							

## 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 strongrooms as a secondary access. They can be also integrated to the main vault door for optimising the installation 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 emergency 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-3E	VD-3EL	VD-6E	
Movable locking bolts (pcs)	7	12	7	
Fixed back bolt bank	yes	-	yes	
Number of keylocks (pcs) (Class)	1+1 (B)	1+1 (B)	2+2 (C)	
Maximum number of locks (pcs)	3	3	3	
Manufactured to EN1143-1	Grade III	Grade III	Grade VI EX	
Barrier/door thickness (mm)	120/193	62/124	120/193	
Entrance W x H (mm)	898x1940	896x1936	898x1940	
Installation clearance W x H (mm)	1200x2150	1200x2150	1200x2150	
Weight (kg)	450	450	800	
Colour light grey, RAL 7035	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-6	VDE-8
Movable locking bolts (pcs)	8	7	6
Fixed back bolt bank	-	yes	yes
Number of keylocks (pcs) (Class)	1 (A)	2 (C)	2 (C)
Maximum number of locks (pcs)	3	3	3
Manufactured to EN1143-1	Grade III	Grade VI EX	Grade VIII CD
Barrier/door thickness (mm)	62/125	120/193	155/225
Entrance W x H (mm)	502x852	600x1040	650x1090
Installation clearance W x H (mm)	850x1090	910x1210	1060x1310
Weight (kg)	120	340	700
Colour light grey, RAL 7035	yes	yes	yes

#### Safe deposit lockers SLK series

# Widest range of standard safe deposit lockers

- Two safety deposit locker models SLK-70 and SLK-90
- Three standard widths are available in both models
- Wide selection of standard locker heights
- Available with mechanical keylocks or electronic locking

# Flexible customer specific solutions

- · Special locker and column sizes
- Special colours and finishing

#### Quality and security

- Manufactured in accordance with ISO 9001:2015 in Helsinki, Finland
- SLK-90 Safety Deposit Lockers tested by Bankers Association



#### Electronic locking

- All doors supplied with an electronic lock and a mechanical Abloy Sentry keylock
- Operation of the lockers either by self-service mode or by traditional bank assisted opening
- Identification with PIN, ID cards or biometric readers
- Deposit management with audit trail

#### Electronic deposit system advantages

- · All safety deposit boxes are equipped with one keylock and one electronic lock
- Opening of the electronic lock by the bank operator or by the customer in self service system
- Opening of the keylock by customer's personal key
- · Proximity card, personal pin code or biometric indentification options
- Unique biometric identification requires both the registered customer and the key for opening the safety deposit box
- Safety deposit boxes and entrance to the safety deposit room can be operated by the bank operator or alternatively as a self service system
- In self service system bank operators are not needed for opening the doors or opening the electronic locks of the safety deposit boxes
- · Only one customer allowed to enter the safety deposit room at once
- Comprehensive reporting including safety deposit box renting status, useractivities and system information

# Safety deposit lockers SLK series



#### Key features

- Abloy Sentry or Euro-Locks keylocks
- Designded for individual storage of personal valuables
- Available in three standard widths
- Wide selection of standard lockers
- SLK-90 Safety Deposit Lockers tested by Bankers Association
- · Total door thickness
  - SLK 70 series 11 mm
  - SLK 90 series 16 mm

#### Options and fittings

- · A variety of locking options
- Options for camera-monitoring (CCTV) and deposit management solutions
- Electronic deposit management solution
- Inner boxes for SLK-70 and SLK-90 models
- Padlocks for inner boxes
- Pull-out trays for SLK-70 and SLK-90 lockers
- Stainless steel-plate doors
- Customer-specific locker and column sizes
- Customer-specific colours and finishing

Standard equipment			
Model	SLK-70 SLK-90	SLK-75 SLK-95	SLK-79 SLK-99
External			
Height, mm	2000	2000	2000
Width, mm (Mechanical keylocks)	303	453	603
Width, mm (Electronic locking)	330	480	630
Depth, mm	460	460	460

# Security doors



# Against burglary and fire

# Helsinki housing co-operative chose security doors

Security doors are gaining popularity in apartments, but also in detached houses. The new buildings are equipped with security doors.

Emilia Larke, the Chairman of Pyynikintie 1 housing co-operative in Helsinki, is more than happy with their decision. In addition to safety, the new doors also raise the comfort of living. "Security doors are now in," she says.

Built in 1975, the house has 91 apartments which originally had wooden doors. In many cases, the doors were in poor shape and approximately 20 doors required instant attention.

"Doors were twisted and difficult to close. Especially the corners were so deformed that you could see through them. We had changed already a couple of doors and some had been temporarily fixed," Emilia Larke says.

However, the biggest concern was safety.

"Renewal of doors was first discussed a couple of years ago. Because there were so many doors to repair, we concluded that it's better to change all the doors in one go, rather than fix them one at a time. In the annual general meeting 2014 we decided to change all the old doors to security doors," Larke says.

During the process, many options were considered. Ordinary wooden doors were one of them, although it was quickly evident that they didn't meet the needs of tenants. The benefits of security doors were what they were looking for.

"The process opened up our eyes on what could have happened. The feeling of safety has increased," Larke adds.

Luckily there haven't been burglaries in Pyynikintie 1 so far.

"An ordinary wooden door with a safety lock can be breaked with a crow bar in less than 30 seconds. The Kaso steel frame and door leaf are tested according to EN-1627 standard," Kaso's Sales Manager **Teija Paakkari** claims. Thanks to its structure and locking, crow bars are useless against a Kaso security door.

The feedback has been positive. One of the tenants said that she now feels safe. And another can stay at his summer cottage for a longer period of time without worry.

The Chairman Larke considers that the price difference between an ordinary door and a security door is only modest. "They are totally different doors. You really get what you pay for."

#### Enhanced fire safety

Thanks to fire seals, fire certified security doors offer better protection when compared to ordinary wooden doors.

"Our security doors resist fire for 45 minutes, while the minimum requirement is 30 minutes," Paakkari argues.

Also the 35 year old locks were changed.

"The keys were from the last century and we had lost track on who has them," Emilia Larke says.

The new doors are equipped with mechanical locks, while electronic locking systems are also available.

#### Strong steel frame and bolts

Insulated with rock wool, the frame of the door and door leaf are steel reinforced. In addition to steel frame, the door is protected against burglary with bolts on all four sides of the door. Door panels fine-tune the appearance.

According to Teija Paakkari, a security door can be installed into an old door opening, even though a reinforcement might be needed. And if there are separate frames for inner and outer doors, the old inner door can be left in place. However, with a security door there is no need for inner door.

#### Better sound insulation

Emilia Larke says that although the doors are robust, they are easy to use.

"From users' point of view, it's just like an ordinary wooden door. The sounds from the stairway are effectively muted. Because the inside of the door is light coloured, it lightens up the hallway. The colour also fits perfectly to most decoration styles," Larke says.

#### Interest is on the rise

According to Teija Paakkari, security doors have been gaining popularity not only in apartments, but also in detached houses.

## **Security doors**

Burglary protection EN 1627 Grade 3 Fire protection EI30

#### Key features

- Private houses, apartments and offices
- · Inside and entrance installations
- New and renovation buildings
- · Steel reinforced door and frame
- Outwards or inwards opening ("push" or "pull")
- · Right or left handed opening
- Bolting on four sides
- Integral locking system with drill protection
- Standard locking options Mottura and Abloy

#### Options and fittings

- Door bell
- Letter box
- Viewing spot
- Access control
- Electronic locking
- Integrated door opening limiter
- Colour, panel and furnishing options
- Tailor made size and design options







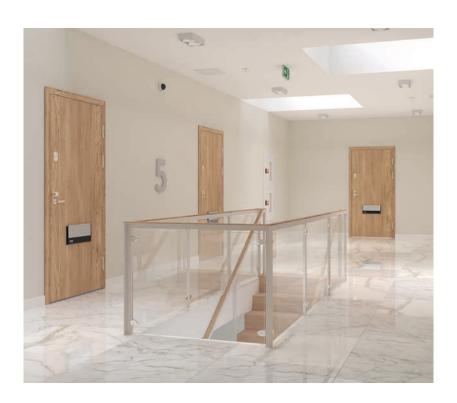


Mottura keylock

Classifications	
Certified burglary protection	Grade 3 (EN 1627)
Fire protection	EI 30
Sound insulation	42Rw
Resistance to wind load	Class C5
Air permeability	Class 4
Water tightness	Class 9A

# Security doors

Burglary protection EN 1627 Grade 3 Fire protection EI30









Stainless steel threshold

Specifications		
Size	9x21	10x21
Installation clearing W x H (mm)	910x2110	1010x2110
Frame W x H (mm)	890x2095	990x2095
Entrance W x H (mm)	780x2020	880x2020
Weight (kg)	95	100
Burglary resistance class (EN 1627)	3	3



Clothes and locker cabinets can be used anywhere where lockable storage space is needed. They are suitable, for example, for industrial facilities, companies, shops, bureaus, hospitals, schools, gyms, sports halls, swim halls and health clubs. Kaso has manufactured clothes cabinets for over 50 years.

#### Clothes and locker cabinets

Durable and good-looking, Clothes and locker cabinets combine ease of use with safety and stylish design. The cabinets are available with a flat or sloping roof. Air-conditioning and double doors are available on request.

#### Choose your design

#### · Pro

Economical and robust steel Pro doors are stronger and more bending-resistant than traditional flat steel doors.

#### · Classic

Durable and solid steel doors equipped with a three-point locking system (top, bottom and side).

#### Green

MDF doors available with various colours and a one-point locking system.

#### · Trend

Laminated door with a choice of colours and a one-point locking system.

#### Solid

Prestige doors made of massive Karelian pine boards with lacquered, stained or painted surface.

#### Model Z clothes cabinets

Kaso Model Z clothes cabinets are a space-saving solution for locations where limited space prevents the installation of regular-sized cabinets. A wide selection of door materials, including steel plate and laminate, is available as well as several options for customisation.

#### Locker cabinets

Locker cabinets are suitable for shops, schools and other spaces, where personal items such as laptops, mobile phones and purchases need to be safely stored for a while.

As an example about locker cabinets, the Kaso Laptop locker with eight lockers, features recharging for devices such as mobile phones, personal computers and cameras in individual lockers.

#### Lockers



#### Key features

- ISO 9001:2008 certificate
- SFS 5340 standard
- Awarded design
- Designed to be used anywhere where lockable storage space is needed

# All compartments of clothes and locker cabinets include

- Hat shelf
- · Clothes rail with three movable hooks
- · Two towel hooks on the steel door
- Ventilation
- Padlock mechanism for users' personal locks, or a permanent lock



#### Options and fittings

- Wall mounting for the cabinet and the bench
- · Abloy serial lock
- Eurolock serial lock
- Deposit/coin-operated lock
- Master key
- Bench constructed from laminated board, steel or lacquered pine boards
- · Removable spacing plate
- · Ventilation duct
- Sloping roof
- Adjustable feet

#### Accessories

- Mirror
- Accessory pocket
- Frame for a name plate
- Key diecutting for department numbering
- Shoe rack

Specifications				
Cabinets	1	2	3	4
Cabinet depth (mm)	525	525	525	525
Cabinet height (mm)	1900/2050	1900/2050	1900/2050	1900/2050
Unit width (mm)	300	600	900	1200
Number of doors/users				
Clothes cabinets	1	2	3	4
Z cabinets	2	4	6	8
Locker cabinets	2-8	4-16	6-24	8-32
Unit width (mm)	400	800	1200	-
Number of doors/users				
Clothes cabinets	1	2	3	-
Z cabinets	2	4	6	-
Locker cabinets	2-8	4-16	6-24	-

#### KKASO

Kaso is made in Finland. We offer internationally certified products and services for property and information protection. For over a century private citizens, banks, institutions and companies around the world have relied on the high Kaso-quality products and services. We combine our professional knowledge in security products with new and innovative technological solutions and modern designs.







