

asecos®



## USER MANUAL

Safety storage cabinets according to  
EN 14470-1



### 10 YEARS WARRANTY

Upon conclusion of an asecos service and maintenance agreement (**PREMIUM tariff**), you will get a warranty extension for up to 10 years for your V-LINE safety storage cabinet.



# V LINE

## V-MOVE-90



V90.196.081.VDAC:0012



V90.196.081.VDAC:0013



V90.196.045.VDAC:0012



V90.196.045.VDAC:0013



**asecos GmbH**  
Customer service  
Weiherfeldsiedlung 16-18  
D-63584 Gründau

Fax: +49 60 51 - 92 20-10

## **YOUR PERSONAL DOCUMENTATION TO THE asecos SAFETY CABINET**

Dear Customer,

you have made a decisive investment in safety for your company by purchasing this asecos safety storage cabinet. You now own an innovative product made of top-quality materials guaranteeing the highest quality standards.

asecos safety storage cabinets have complete authorisation documents. We archive the authorisation documents for every individual cabinet, keeping them ready for you should you ever need them (e.g. for a works inspection or similar). Simply request them using this form.

Tear of or copy that page and return to us by fax with your address and serial number of the cabinet on it.

Yours sincerely  
asecos GmbH

### **Contact**

<b>Company</b>		
<input type="text"/>		
<b>Street</b>	<b>Postal code</b>	<b>Town</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Name of contact person</b>		
<input type="text"/>		
<b>email</b>	<b>Phone No.</b>	
<input type="text"/>	<input type="text"/>	
<b>Serial numbers of safety storage cabinets</b>		
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

# OPERATING INSTRUCTIONS

Dear customer,

Thank you very much for purchasing a safety storage cabinet from our company, with which you have made a decisive investment in the safety within your company. Our safety storage cabinets make the storage of hazardous materials at the workplace safe and convenient for you.

Please read these operating instructions very carefully. Get to know the advantages and simple operability of our safety storage cabinets in detail. This simplifies the daily handling of hazardous materials for you.

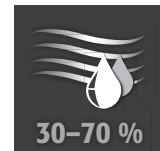
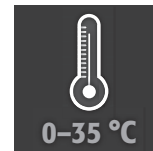
Many thanks  
Your asecos team

<b>1. NOTES • GUIDELINES • GUARANTEE</b> .....	<b>5</b>
1.1. General safety notes .....	5
1.2. Guarantee .....	5
1.3. Cabinet Details .....	5
<b>2. TRANSPORT</b> .....	<b>6</b>
2.1. Tilting the cabinet .....	6
2.2. Dismantling of the transport packaging .....	6
2.3. In-plant transport .....	7
<b>3. ERECTION • COMMISSIONING • FUNCTION</b> .....	<b>7</b>
3.1. Commissioning .....	7
3.2. Connection to the power supply .....	7
3.3. Alignment Of The Cabinets .....	7
3.4. Locking of the cabinet .....	8
3.5. Unlocking of the cabinet .....	9
3.6. Automatic door closing system (TSA) .....	9
3.7. Disable the automatic door closing system .....	9
<b>4. SAFETY FUNCTIONS</b> .....	<b>10</b>
4.1. Closing the drawer during blackout .....	10
4.2. Automatic closing in the event of fire .....	10
4.3. Blocking the drawer while opening .....	10
4.4. Blocking the drawer while closing .....	11
<b>5. SURCHARGE (TOP-MOUNTED CABINET)</b> .....	<b>11</b>
5.1. Assembly of the attached cabinet .....	12
<b>6. INTERIOR FITTINGS</b> .....	<b>12</b>
6.1. Bottom collecting sump .....	12
6.2. Shelves (height-adjustable) .....	13
6.3. Shelf guard rail system .....	13
<b>7. STORAGE</b> .....	<b>13</b>
<b>8. EARTHING</b> .....	<b>14</b>
8.1. Grounding bolt .....	14
<b>9. VENTILATION</b> .....	<b>15</b>
<b>10. FIRE • DISPOSAL</b> .....	<b>15</b>
10.1. Opening the cabinet after the fire .....	15
10.2. Disposal .....	15
<b>11. SAFETY CHECKS</b> .....	<b>15</b>
11.1. In general .....	15
11.2. Battery check .....	16
<b>12. TECHNICAL DATA</b> .....	<b>16</b>

## 1.1. GENERAL SAFETY NOTES

- Observe applicable statutes and regulations, and the notes in these operating instructions, when handling hazardous materials
- Work on the electrical system is to be carried out only with the power turned off and only by qualified electricians – refer here to the regulations of the local electricity supply company.
- The on-site installation conditions are to be observed (e.g. bolting the cabinets to the building).
- The instructions of the supervisory engineering department must be followed.
- Observe accident prevention regulations and workplace ordinance
- **Ensure that the necessary safety checks are only carried out by authorised staff using original spare parts**
- Only use the cabinet after having been properly instructed; access is to be forbidden to unauthorised persons.
- The pivoting area of the doors is to be kept free at all times; doors/drawers are to be kept closed
- By assigning trained/authorised technical personnel you can prevent the malfunctions, damage and corrosion damage that result from inappropriate transport.
- Observe the upper limits for stored quantities, loading etc.
- Containers with a volume larger than that of the bottom collecting sump may not be placed inside the cabinet; spilt hazardous materials are to be collected immediately and removed
- Vessels containing aggressive chemicals (acids/alkalis) are to be kept in special cabinets for acids and alkalis or on shelves for acids and alkalis as well as in cabinets with metal-free interior equipment.
- Before storing such materials, check that the cabinet's surface is resistant to the chemicals.
- Before the initial commissioning, the safety storage cabinet is to be examined by the user for possible damage.

### Set-up requirements



## 1.2. GUARANTEE

The guarantee for this product is agreed between you (the customer) and your dealer (the seller). As the manufacturer, asecos guarantees the products listed in the operating instructions for a period of 24 months from the date of delivery. All model safety equipment are subject to a compulsory annual inspection by specialised staff authorised by the manufacturer. Otherwise the customer's guarantee claim against the manufacturer expires.

## 1.3. CABINET DETAILS

A complete overview of the models can be found at the start of the operating instructions.  
**Development: asecos GmbH Sicherheit und Umweltschutz, D-63584 Gründau.**

**Cabinet data: Logbook (included with the cabinet)**  
**Technical drawing: Appendix 1**  
**Technical data: Table in Appendix 2**

### V-LINE

These models are tested, certified and marked according to requirements of BS EN 14470-1. They are intended for the storage of flammable liquids in work rooms in accordance with the valid national regulations.

## 2. TRANSPORT



**CAUTION:**

Transport the cabinet in an upright position on a pallet truck, tied and secured against slipping, until the final place of installation is reached. The transport locks in the door joints may only be removed directly at the place of installation! Inappropriate transport can lead to concealed damage to the fire protection insulation! We can only guarantee the necessary quality if the cabinet is transported to the place of its use by our specially trained staff.



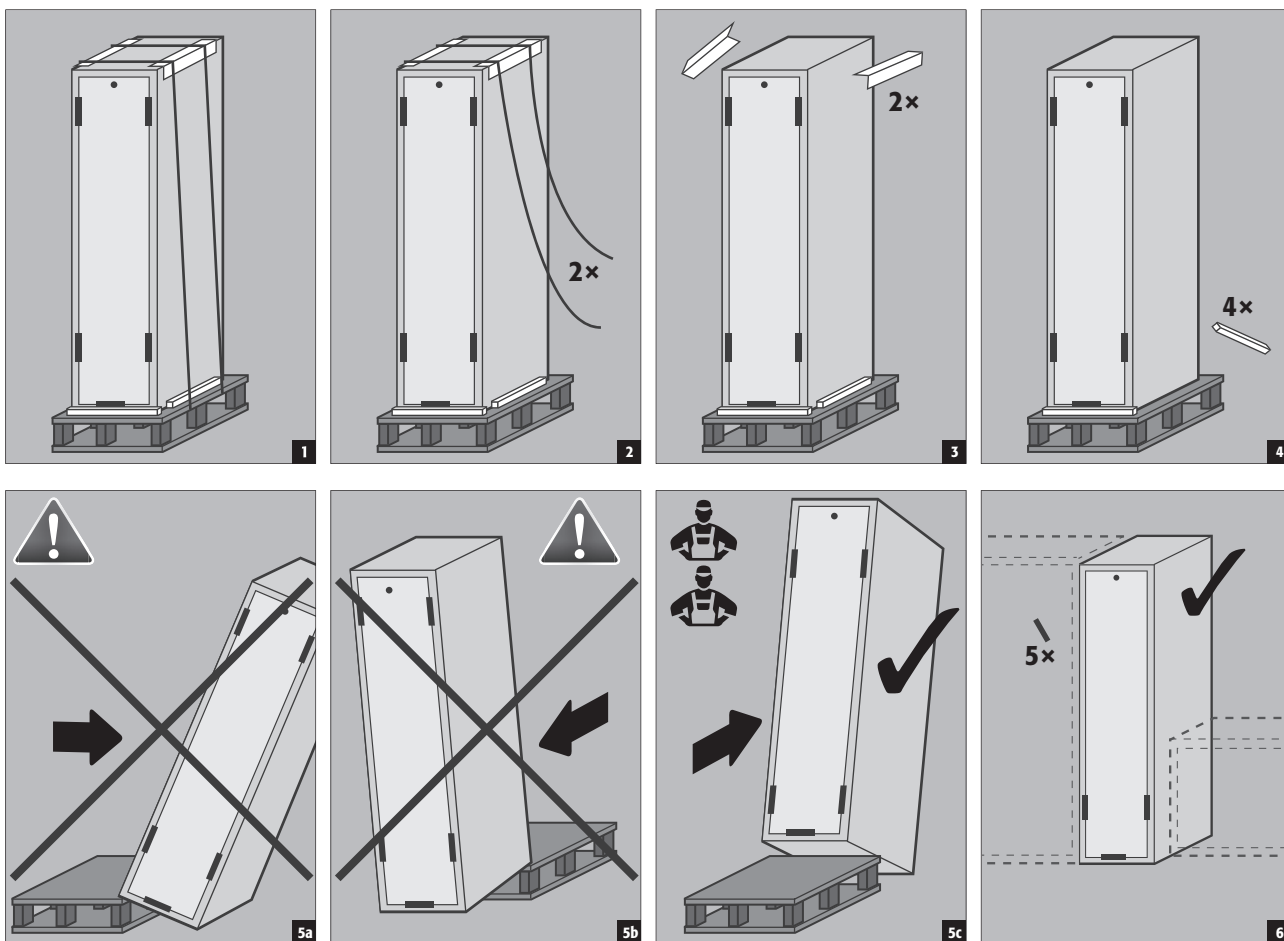
**CAUTION:**

The cabinet must not be moved by pulling the opened drawer! Pulling or sliding may only be carried out in the body housing!

### 2.1. TILTING THE CABINET



### 2.2. DISMANTLING OF THE TRANSPORT PACKAGING

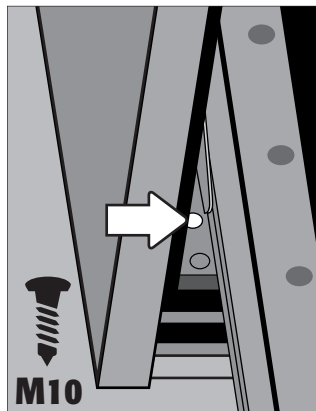


### 2.3. IN-PLANT TRANSPORT



**CAUTION:**

The cabinet must not be moved by pulling the opened drawer! Pulling or sliding may only be carried out in the body housing!



**Steps for manoeuvring the cabinet:**

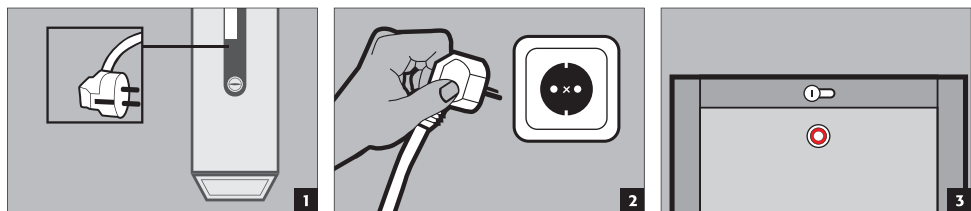
- Open the drawer of the cabinet
- Connect the belts with steel angles or steel rings using a screw M10
- Screw the steel angles/rings into the threaded insert in the base of the cabinet
- Move the cabinet carefully using the belts

## 3. ERECTION - COMMISSIONING - FUNCTION

### 3.1. COMMISSIONING

- Before putting into operation for the first time, the user must carry out an examination of the safety storage cabinet for possible damage, such as defective or loose sealing elements, correct alignment and perfect functioning of the door elements.  
Use the cabinet and accessories only if they are in an orderly condition.

### 3.2. CONNECTION TO THE POWER SUPPLY



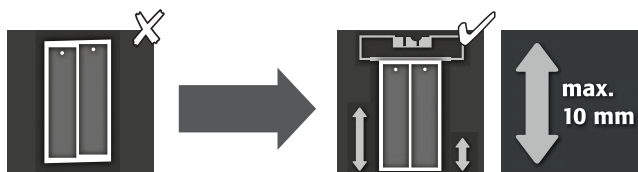
**CAUTION**

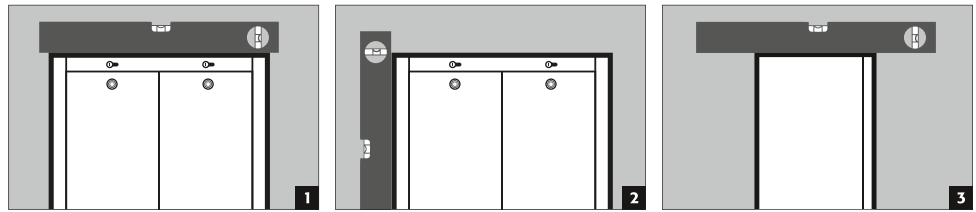
The cabinet must be connected to the power supply at least 1 hour before storing items for the first time!

### 3.3. ALIGNMENT OF THE CABINETS

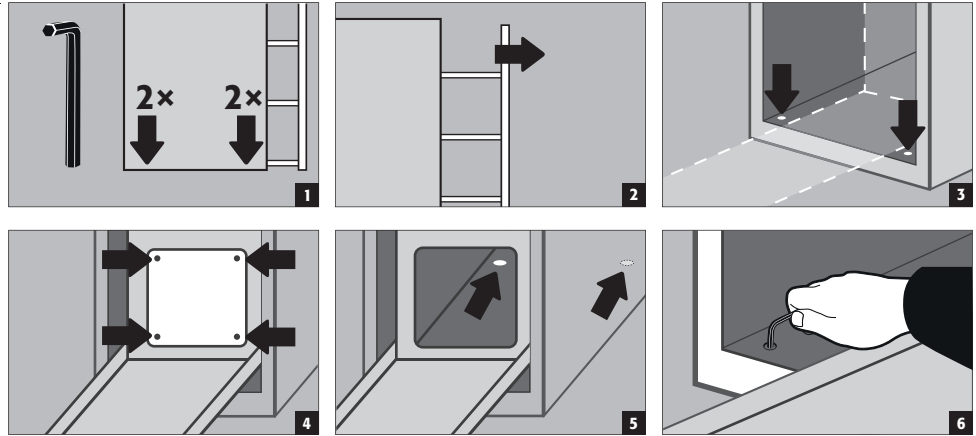


After disabling the automatic door closing (see 4.4) and opening the drawer, the cabinet can be aligned using the integrated adjusting aids.

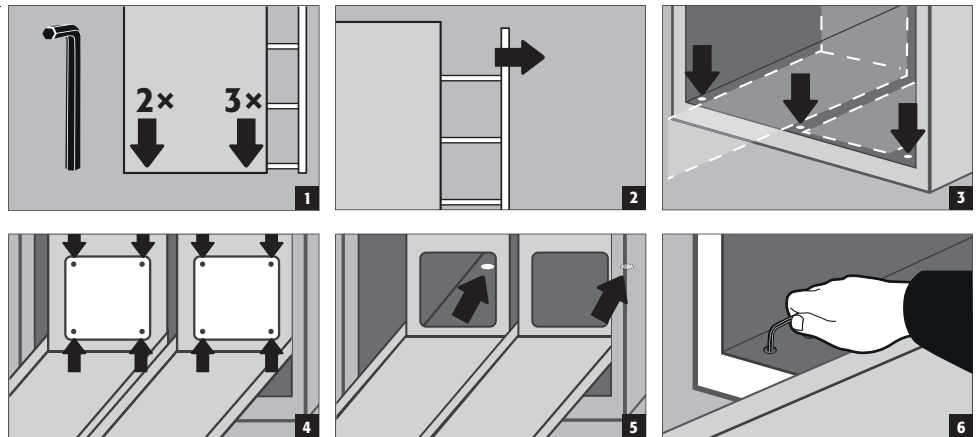




V90.196.045.VDAC



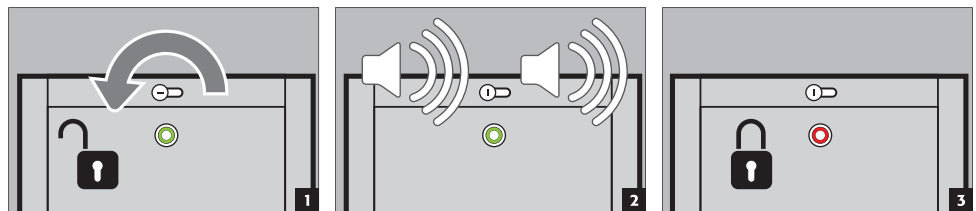
V90.196.081.VDAC



**NOTES to figures 4 and 5**

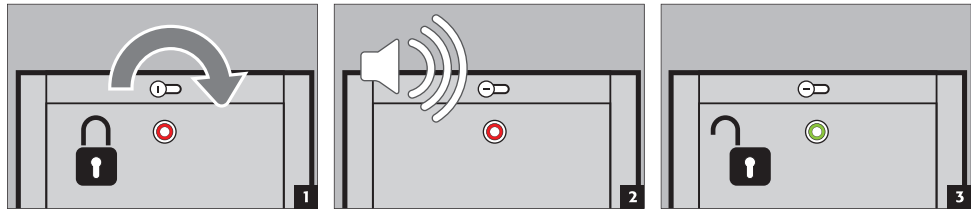
Only one vertical drawer can be opened at a time while the other one remains closed.

**3.4. LOCKING OF THE CABINET**

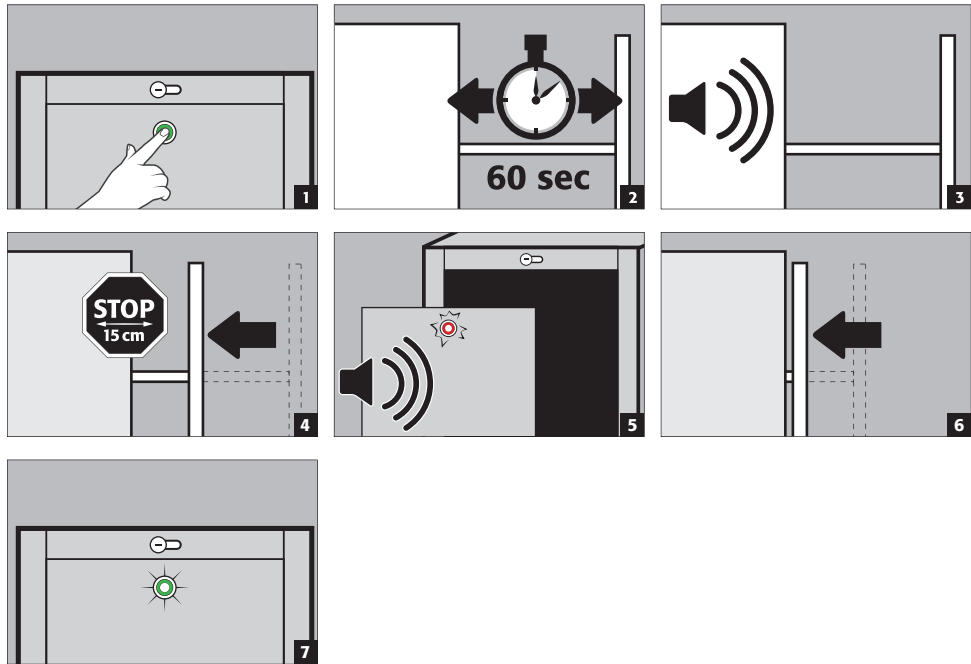




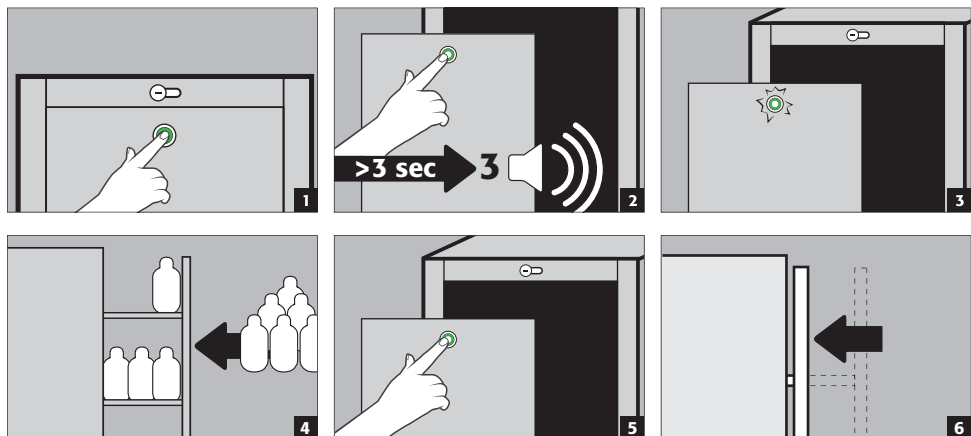
### 3.5. UNLOCKING OF THE CABINET



### 3.6. AUTOMATIC DOOR CLOSING SYSTEM (TSA)



### 3.7. DISABLE THE AUTOMATIC DOOR CLOSING SYSTEM



**ATTENTION:**  
In case of fire the automatic door closing is always ensured!

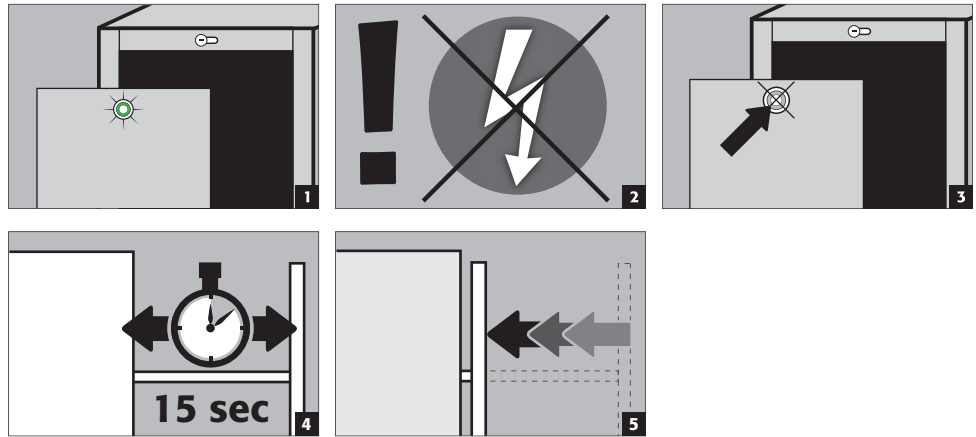
## 4. SAFETY FUNCTIONS

### 4.1. CLOSING THE DRAWER DURING BLACKOUT

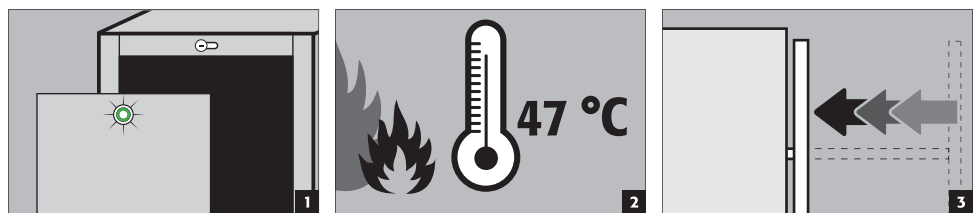


**CAUTION:**

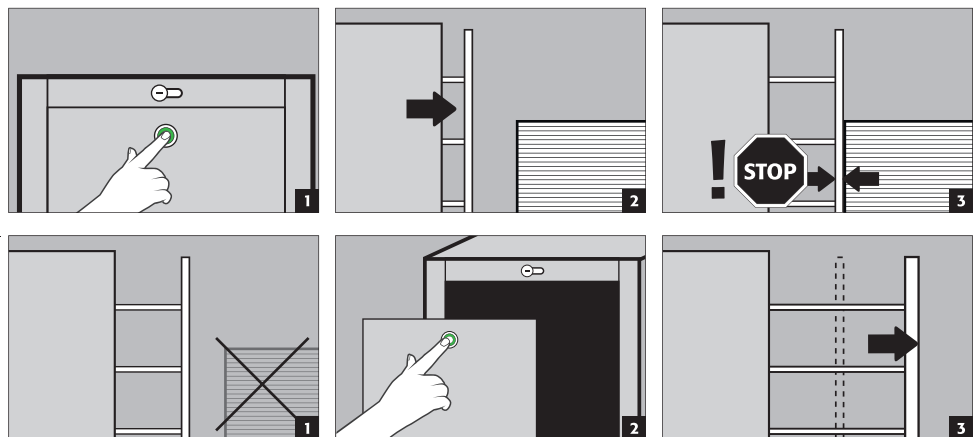
During a blackout the opened drawer will close automatically using an integrated battery. Please note, it only has power **for one** closing routine.



### 4.2. AUTOMATIC CLOSING IN THE EVENT OF FIRE



### 4.3. BLOCKING THE DRAWER WHILE OPENING



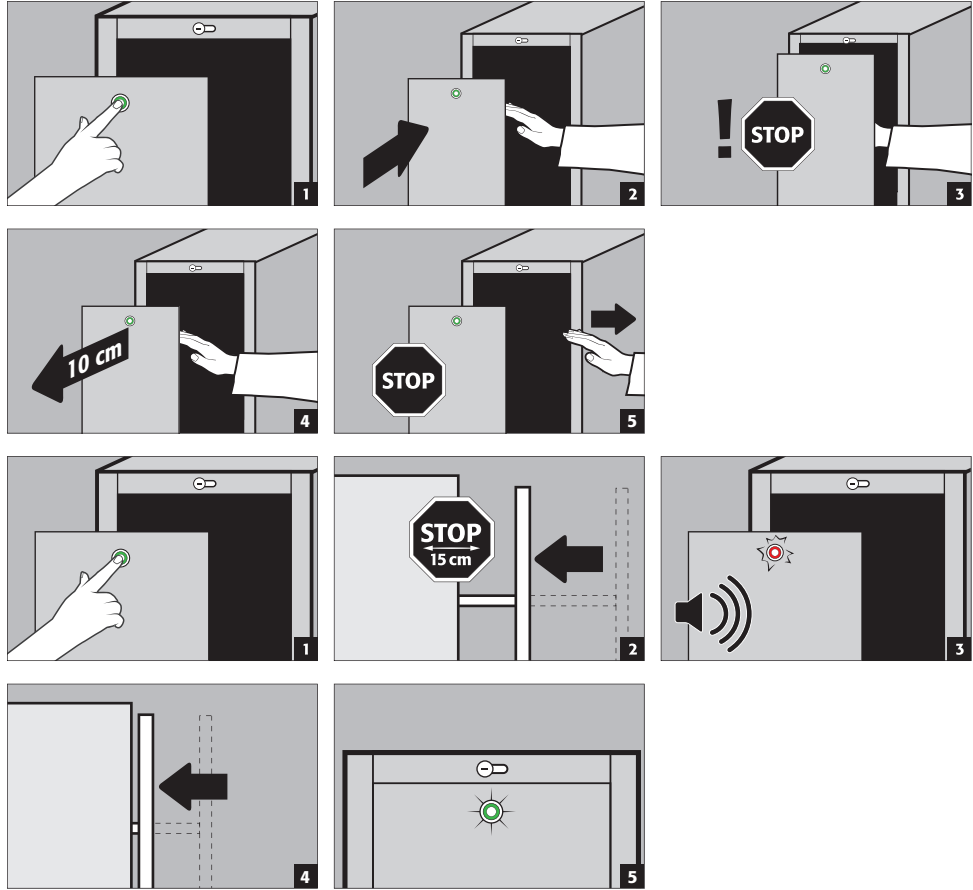
Release blockage



**CAUTION**

If no direct user intervention occurs after the blockage, the cabinet will give an acoustic and visual alarm after 20 seconds. In that case, please remove the blockade and follow the previous steps!

### 4.4. BLOCKING THE DRAWER WHILE COSING



Release blockage



**CAUTION**

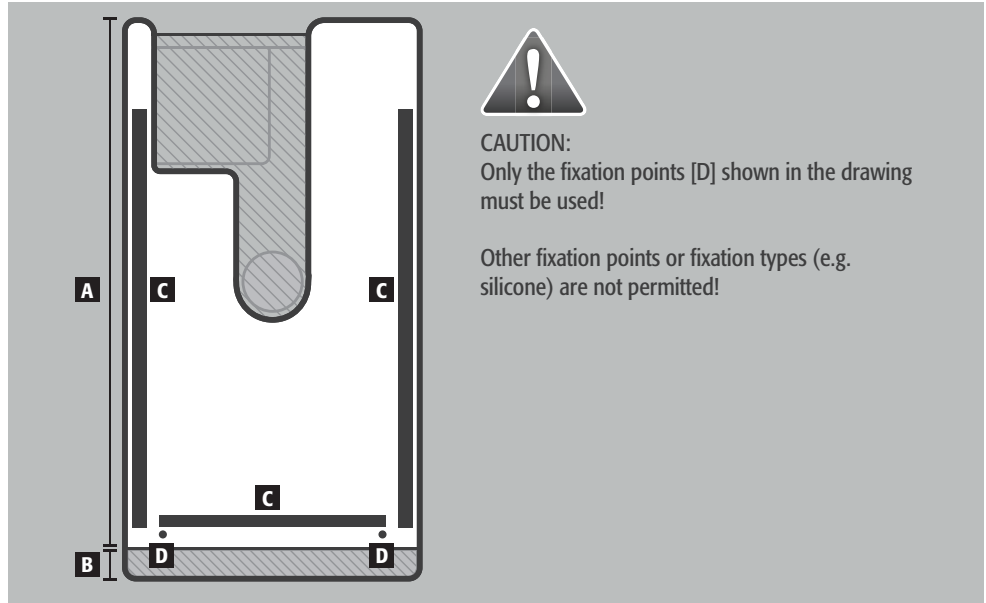
If no direct user intervention occurs after the blockage, the cabinet will give an acoustic and visual alarm after 20 seconds. In that case, please remove the blockade and follow the previous steps!

## 5. SURCHARGE (TOP-MOUNTED CABINET)



The V-LINE safety storage cabinets can be loaded if the cabinet was ordered with article HF.L.32864 (order no. 38275). These cabinets are then structurally adjusted at the factory and additionally marked on the outside as load-bearing.

- A** head section rear
- B** head section front
- C** magnetic tape
- D** fixation points for screw M6

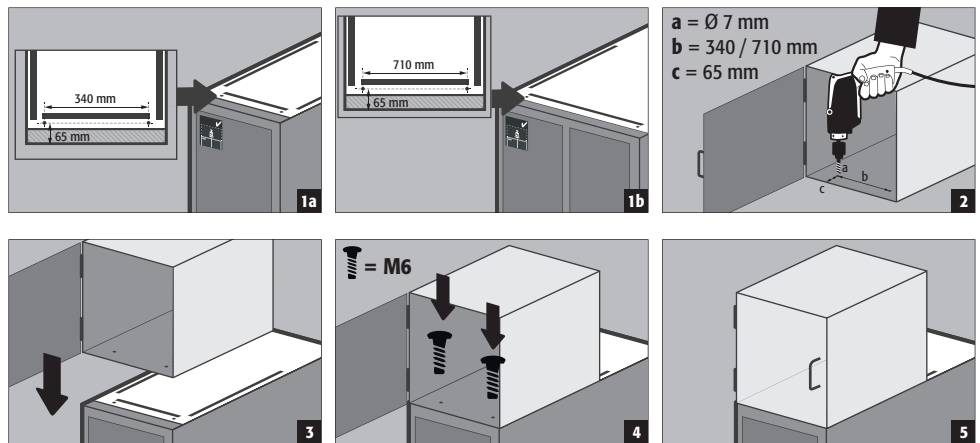


- The magnetic tape mounted on the headboard serves as a support surface for the top cabinet and can be cut to size if required.



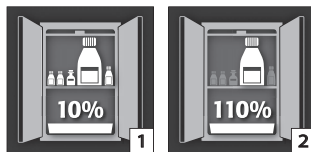
**CAUTION:**  
The magnetic tape may only be attached to the rear head section!

### 5.1. ASSEMBLY OF THE ATTACHED CABINET



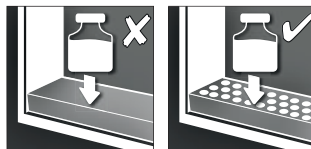
## 6. INTERIOR FITTINGS

### 6.1. BOTTOM COLLECTING SUMP



**According to EN 14470-1:** The bottom collecting sump must be able to hold a minimum volume of 10 % of all the containers stored in the cabinet [1] or at least 110 % of the volume of the largest single container [2], whichever of these volumes is larger.

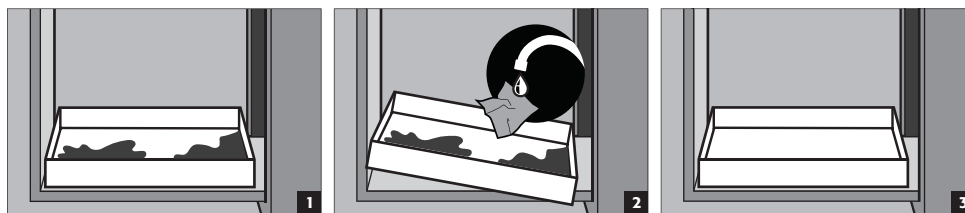
**Use as a storage surface in case of cabinets with several storage levels:**



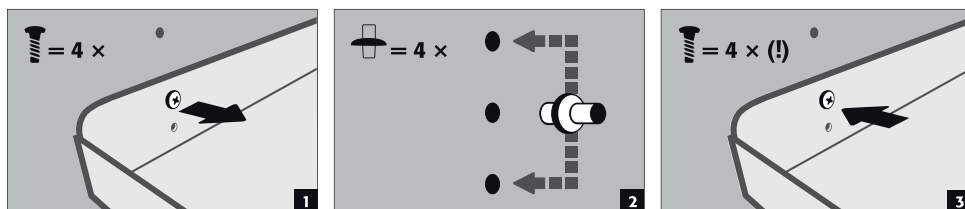
**CAUTION:**  
Use as a storage surface is possible only in conjunction with a perforated metal plate insert.

**Leaks:**

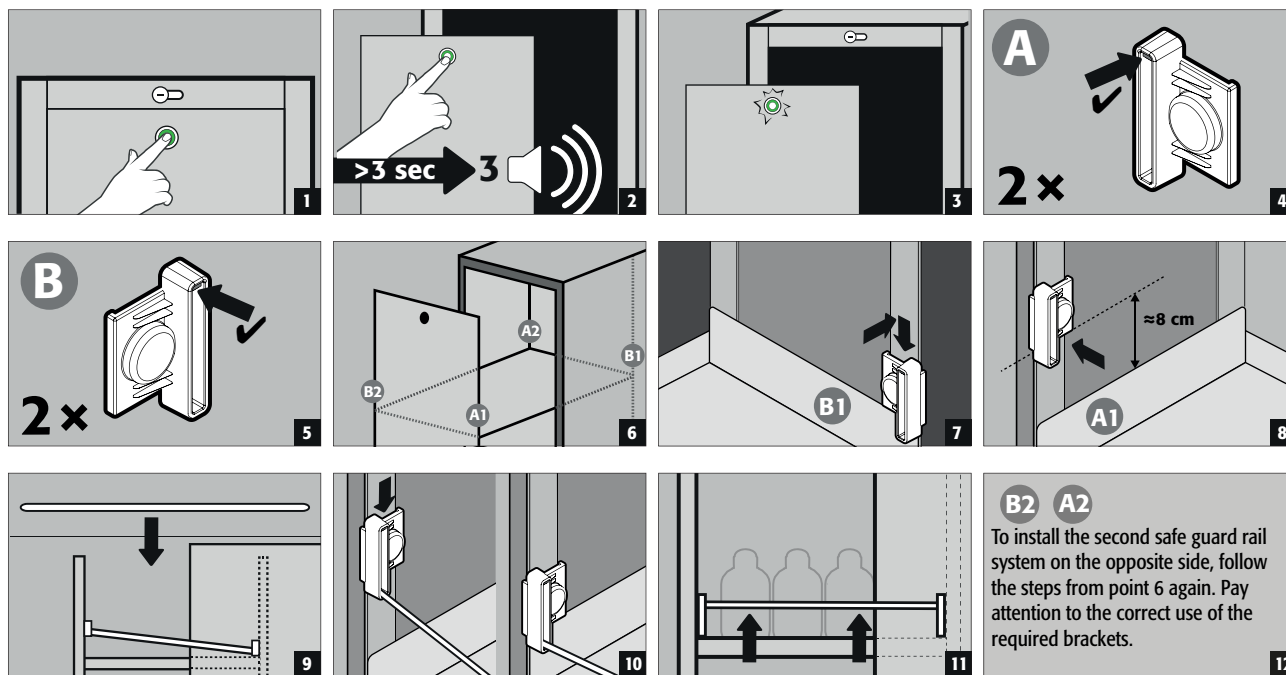
- Liquid in the sump is to be collected using suitable means.



**6.2. SHELVES (HEIGHT-ADJUSTABLE)**



**6.3. SHELF GUARD RAIL SYSTEM**



**7. STORAGE**

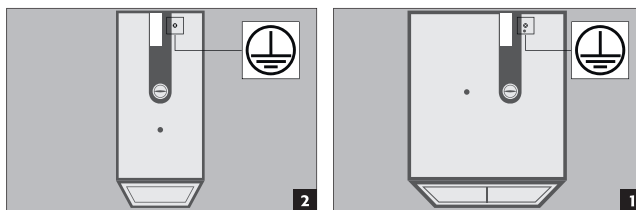
- Vessels containing aggressive chemicals (acids and alkalis) are to be kept in special cabinets for acids and alkalis or on shelves for acids and alkalis as well as in safety storage cabinets with metal-free interior equipment.
- The storage of corrosive liquids can affect the function of the shut-off equipment for the air supply and exhaust.
- Each container placed inside reduces the minimum containment volume in relation to the total stored quantity.



Applicable for all models: Depending on the type class of the cabinet, observe the respective valid national regulations!

## 8. EARTHING

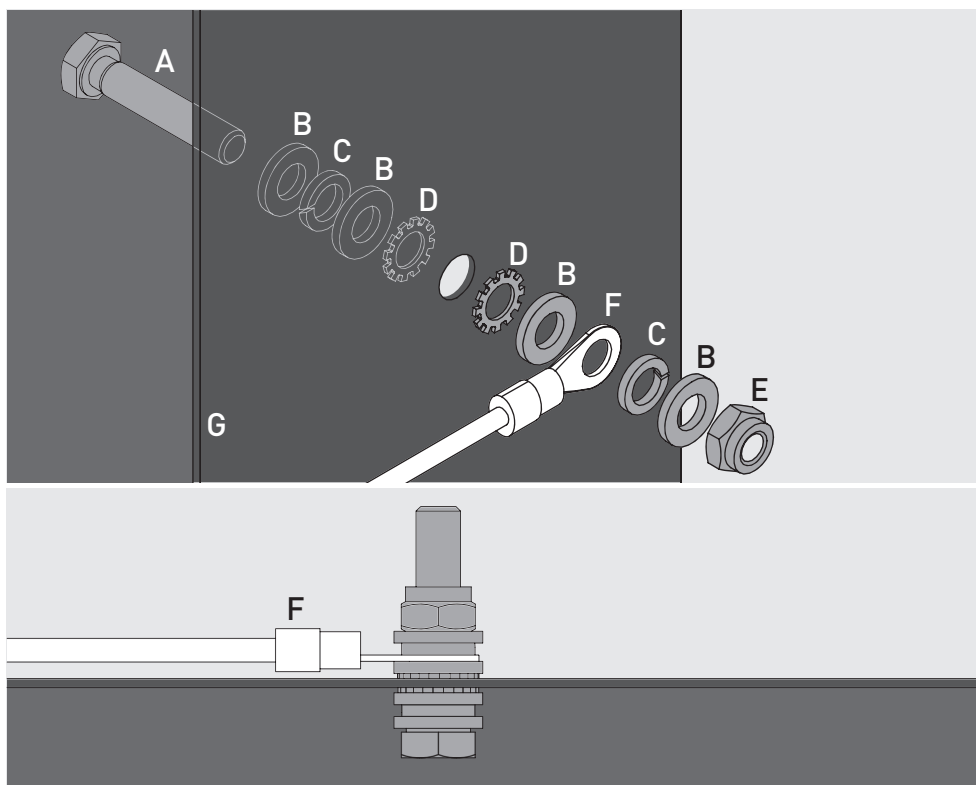
- An earth connection may be necessary, depending on the customer-specific use of the safety storage cabinet. The decision regarding this is taken on the basis of a risk analysis by the customer.



### Earthing when decanting:

Connection to a potential equalisation system is compulsory in this case. Cabinets in which decanting can be performed should additionally be equipped with an earth terminal in the interior (at a surcharge on enquiry) which must be connected to the decanting containers. This is standard with cabinets from the UB-LINE with drawers.

### 8.1. GROUNDING BOLT



Legende	
<b>A</b> 1 × screw M6×30	<b>E</b> 1 × nut with clamping part
<b>B</b> 4 × washer Ø 6,4	<b>F</b> earthing wire with ring cable lug (on-site connection)
<b>C</b> 2 × spring washer Ø 6,4	<b>G</b> metal part of the safety storage cabinet
<b>D</b> 2 × serrated lock washer Ø 6,4	

## 9. VENTILATION



### CAUTION

The fire protection valves near the supply and extraction air connections are safety and maintenance-relevant components.

In order to check the correct operation or to replace a defective element, please ensure that flexible connecting hoses or sliding pieces are used to connect to an extraction system in order to ensure simple dismounting and re-mounting of the extraction air connection.

- All models can be connected to a technical exhaust system via the exhaust connector. Please see the respectively applicable national regulations for the specified air recirculation rate, maximum pressure losses and exhaust air ducts.
- If installed on an exhaust system, a check must be carried out to ensure proper connection to the system (e.g. using a smoke tube)



### CAUTION:

In general these models can be operated without technical ventilation. The direct environment of the cabinet can be an explosive zone in this case. If the cabinet is to be operated without an exhaust connection, the user must attach a marking to it.

## 10. FIRE - DISPOSAL

### 10.1. OPENING THE CABINET AFTER THE FIRE



### CAUTION:

Depending upon the duration of the fire an ignitable vapour/air mixture may have formed; therefore remove all sources of ignition within a 10 metre radius of the cabinet before opening it.

- use only spark-free tools
- open the cabinets with extreme caution

### 10.2. DISPOSAL



The models can be disposed of once they have been dismantled and the materials sorted.

## 11. SAFETY CHECKS

### 11.1. IN GENERAL

As safety equipment the cabinets have to be checked for safety at least once per year. The next checking date can be taken from the service sticker on the outside of the door. This annual check can be carried out with the necessary care, and for securing your warranty claims in the case of fire, only by an authorised asecos employee (refer also to our service brochure regarding this).

**In addition, we recommend that you carry out a daily and monthly functional check:**

#### Daily functional check

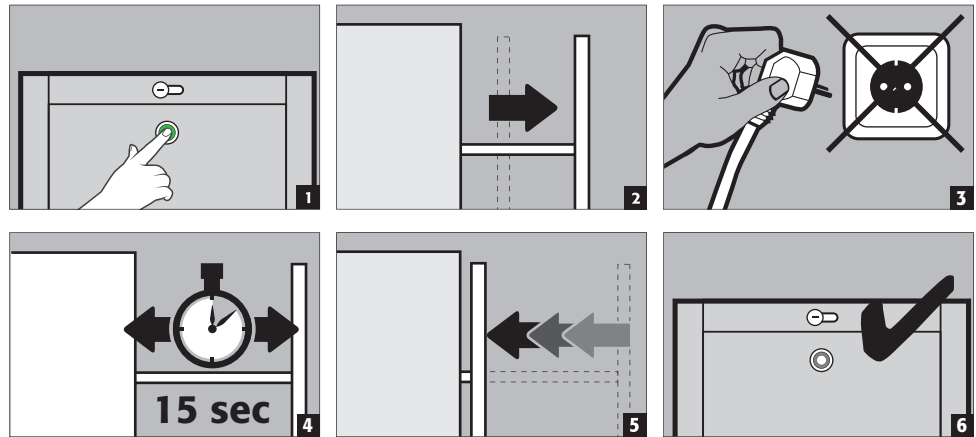
- applies to the spill containment sumps (collect and remove any leakages)

#### Monthly functional check

- perfect function of the drawers
- correct seating and condition of the fire protection seals

## 11.2. BATTERY CHECK

- Every six months after the maintenance check the battery should be checked by the user of the cabinet.



### ATTENTION

The rechargeable battery is considered a wearing part which has to be replaced every 3 years. If this is not done in the course of an asecos service measure, this must be done by the customer.

### Case of damage

In case of damage please contact your dealer in order to have the cabinet repaired using original spare parts. The cabinets can be cleaned with a mild household cleaner and a soft cloth.



### CONTACT:

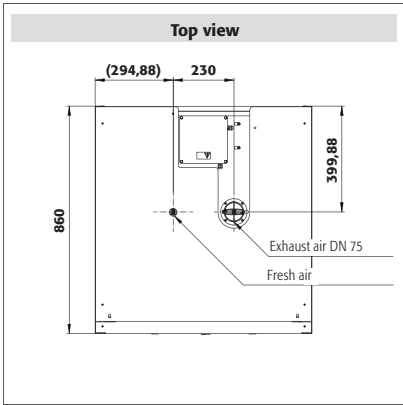
In the case of defects or complaints about our products (within and also after the warranty period), and for requesting safety checks or taking out a service contract, please contact our service hotline on:

Tel: +44 1785 22 70-90 info@asecos.co.uk

## 12. TECHNICAL DATA

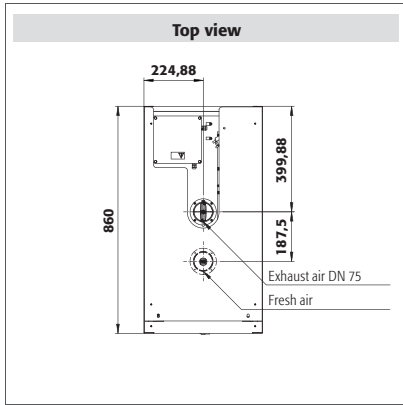
In general		V90.196.081.VDAC:0013	V90.196.081.VDAC:0012		
Type		90	90		
External dimensions W x D x H	mm	819 x 860 x 1966	819 x 860 x 1966		
Internal dimensions W x D x H	mm	701 x 775 x 1750	701 x 775 x 1750		
Weight without interior equip.	kg	500	500		
Distributed load	kg/m <sup>2</sup>	512.00	512.00		
Extraction air	DN	75	75		
Air change <b>10 times</b>	m <sup>3</sup> /h	9	9		
Diff. pressure (air change <b>10 times</b> )	Pa	5	5		
Diff. pressure (air change <b>10 times EK5/AK4</b> )	Pa	5	5		
Power consump. in operation	W	50	50		
Power consump. in standby mode	W	0,5	0,5		
Max. current consumption	A	0,5	0,5		
Nominal voltage	V	85-265	85-265		
Frequency	Hz	50/60	50/60		
<b>Characteristics of each vertical drawer</b>					
Maximum load vertical drawer	kg	140	140		
Max. shelf load (evenly distributed)	kg	50.00	50.00		
Capacity bottom collecting sump	litres	12.50	12.50		
Volume massimo del contenitore	litres	11.36	11.36		
Max. storage capacity	litres	125.00	125.00		





V90.196.081.VDAC:0012

V90.196.081.VDAC:0013



V90.196.045.VDAC:0012

V90.196.045.VDAC:0013





#### **asecos GmbH**

Sicherheit und Umweltschutz  
Weiherfeldsiedlung 16-18  
DE-63584 Gründau

☎ +49 6051 92200  
☎ +49 6051 922010  
✉ info@asecos.com

#### **Asecos BV**

Veiligheid en milieubescherming  
Tuinderij 15  
NL-2451 GG Leimuiden

☎ +31 172 506476  
☎ +31 172 506541  
✉ info@asecos.nl

#### **asecos SARL**

Sécurité et protection de l'environnement  
1, rue Pierre Simon de Laplace  
FR-57070 Metz

☎ +33 3 87 78 62 80  
✉ info@asecos.fr

#### **asecos S.L.**

Seguridad y Protección del  
Medio Ambiente  
CIM Vallès, C/ Calderí S/N  
Oficinas 75 a 77  
ES-08130 - Santa Perpètua de Mogoda  
Barcelona

☎ +34 935 745911  
☎ +34 935 745912  
✉ info@asecos.es

#### **asecos Ltd.**

Safety and Environmental Protection  
Profile House  
Stores Road  
Derby, Derbyshire  
DE21 4BD

☎ +44 1332 415933  
✉ info@asecos.co.uk

#### **asecos**

Safety and Environmental Protection Inc.  
19109 West Catawba Avenue, Suite 200  
Cornelius, NC 28031  
USA

☎ +1 704 8973820  
☎ +49 6051 922010  
✉ info@asecos.com

#### **asecos Schweiz AG**

Sicherheit und Umweltschutz  
Gewerbe Brunnmatt 5  
CH-6264 Pfaffnau

☎ +41 62 754 04 57  
☎ +41 62 754 04 58  
✉ info@asecos.ch