VERTIPLAT

GENERAL OPERATION AND MAINTENANCE INSTRUCTIONS

INSTALLATION COMPANY:	
No Vertiplat:	
COMMISSIONING DATE:	
MAINTENANCE COMPANY:	

1. ABOUT THIS DOCUMENTATION

The current document is an integral part of lifting systems Vertiplat that all of the components are manufactured by KLEEMANN.
If the Vertiplat system is modified, the current documentation must be updated.

KLEEMANN follows a policy of continuous development of its products and retains the right to change and improve the products, which are described in the current document without any notice.

The current document refers to vertical system transport for persons, which operate under normal weather conditions and are used for the purposes that were designed for.

1.1 Purpose and scope of the current document

The owner's documentation is intended for:

- The owner of the installation
- Maintenance person
- Trained persons

The following instructions have the purpose of familiarizing the above with:

- The safe and economical use of the vertiplat system under normal conditions
- The procedure of rescue operations
- The maintenance of the system

These instructions are delivered with every new installation and must be taken under consideration in order to prevent accidents and ensure the reliability of the system.

1.2 Intended use of the Vertiplat system

The system was designed **only** for the vertical transportation (confirm the specifications with the installer).

Overloading the system could cause accidents and damage to property. The maximum rated load of the system is inscribed on certification and must always be observed.

The combined load of the person and goods should not exceed the maximum rated load.
The load must be evenly distributed over car floor and positioned in such a way as to prevent it from falling or moving during the operation of the system.
If the system is used for any other reason apart from the one that it is was designed and installed for, the installer and manufacturer do not have any responsibility for any potential damages or injuries that may occur.

2. SYMBOLS

DANGER: This symbol draws attention to a high risk of injury to persons. It must always be obeyed.

Warning: This symbol draws attention to information, which, if not observed can lead to injury to persons or extensive damage to property. The warnings must always be observed.

Caution: This symbol draws attention to information containing important instructions for use. Failure to observe the instructions can lead to damage and faults.

Important note.

3. DEFINITIONS

MAINTENANCE: All the necessary operations to ensure the safe and intended functioning of the installation and its components after the completion of the installation and throughout its life cycle.

MAINTENANCE ORGANIZATION: Company or part of company where competent maintenance person(s) carry out maintenance operations on behalf of the owner of the installation.

COMPETENT MAINTENANCE PERSON: Designated person, suitably trained (see EN ISO 9000 series), qualified by knowledge and practical experience, provided with necessary instructions and supported within their maintenance organization to enable the required operations to be safely carried out. Will be referred as a maintenance person.

MANUFACTURER: Natural or legal person who takes responsibility for the design, manufacture and placing on the market either of safety components for lifting systems

INSTALLER: Natural or legal person who takes responsibility for the design, manufacture, installation and placing on the market of lifting systems

INSTALLATION: One or more completely installed goods passenger lift. Will be referred as lifting system.

OWNER OF THE INSTALLATION: Natural or legal person who has the power of disposal of the installation, and takes the responsibility for its operation and its intended use

TRAINED PERSON: Persons authorized by the owner of the installation, who have been trained by the maintenance company to perform specific tasks allotted to them

RESCUE OPERATION: Operation starting after receiving notification of a person(s) trapped in the lifting system and finishing by releasing the trapped person(s).

SAFETY COMPONENTS: Components, which are defined as safety components in the EU Machinery directive (98/37/EC and 2006/42/EC).

4. DUTIES OF THE OWNER

The owner of the installation is responsible for ensuring the use of the installation as intended. The need for the owner to take into account of any National regulations and other requirements, where relevant, and their implications on maintenance.

4.1 Maintenance of the lifting system

In order to achieve the above, the owner should assign the maintenance of the lifting system to a maintenance organization, that conforms to the regulations of the country that the system was installed and the instructions of the installer, which are included in the maintenance instructions (see relevant chapter).

The owner must ensure that the regular and programmed maintenance of the system by the maintenance organization. The first maintenance must take place when the system is commissioned for the first time. The owner should inform the maintenance organization if the installation is going to be out of service for a prolonged period of time. Before the installation is put back into service the owner should inform the maintenance organization in order to perform the required checks and maintenance.

4.2 Availability of keys & documentation

The owner of the installation should ensure that the keys to machine and pulley room, trap doors (when available) and of inspection and emergency doors are permanently available in the building and are used only by authorized persons to gain access. The machine room should always be locked.

- ❑ The owner should also ensure the current document and the installation instructions of all the parts are located at the installation site and available for the maintenance organization.

4.3 Dangerous situations- rescue operations

The owner should put the lifting system out of service in dangerous situations and inform the maintenance organization immediately. The owner should inform the maintenance organization after any rescue operation performed by trained persons.
Trained persons or the maintenance organization should only perform the rescue operations.

4.4 Access to the installation

The owner of the installation must provide, in all circumstances, safe access to the building and to the installation for the maintenance organization involved in the lift rescue operations. The owner should keep the access to working areas and working rooms safe and free for the maintenance persons and to inform the maintenance organization about any hazard or change in the workplace and/or the access ways, as well as for any additional protective equipment that must be used if required. The owner must also inform the maintenance organization for the procedures that should be followed in case of a fire.

4.5 Changes-modifications

The owner should inform the maintenance organization immediately, in case of malfunction or changes to the environment affecting the lifting system. The owner should also inform the maintenance organization for any modifications relating to the installation, use or the environment of the installation. The owner should also inform the maintenance organization before any work that is going to take place or checks on the installation, by any persons except from the authorized maintenance organization.

4.6 Risk assessment

The owner should take under consideration the consequences, which are predicted in the risk assessment performed by the maintenance organization.

The owner must verify that a risk assessment was performed when:

- The maintenance organization is replaced
- If the intended use of the building or the lifting system changes
- After major modifications to the building or of the lifting system
- After an accident involving the installation

4.7 Periodic checks by the owner

A full ascent and descent to assess any changes in the quality of the ride or damage to the equipment.
Typical items to be checked to ensure that they are in place, undamaged and functioning correctly are:

- **Platform door-bar**

- Do the doors-bar open and close smoothly?
- Does the electromagnet hold the door open (if platform has door)?
- Does the key and lock of the door-bar closes normally?
- Does the platform remain still if one of the doors-bar is open?

- **Floor doors**

- Do the floor doors open and close smoothly?
- Does the electromagnet hold the door open?
- Does the key and lock of the door closes normally?
- Does the platform remain still if one of the doors is open?

- **Stopping accuracy**

- Does the platform stop with accuracy at the floor?

- **Landing push controls**

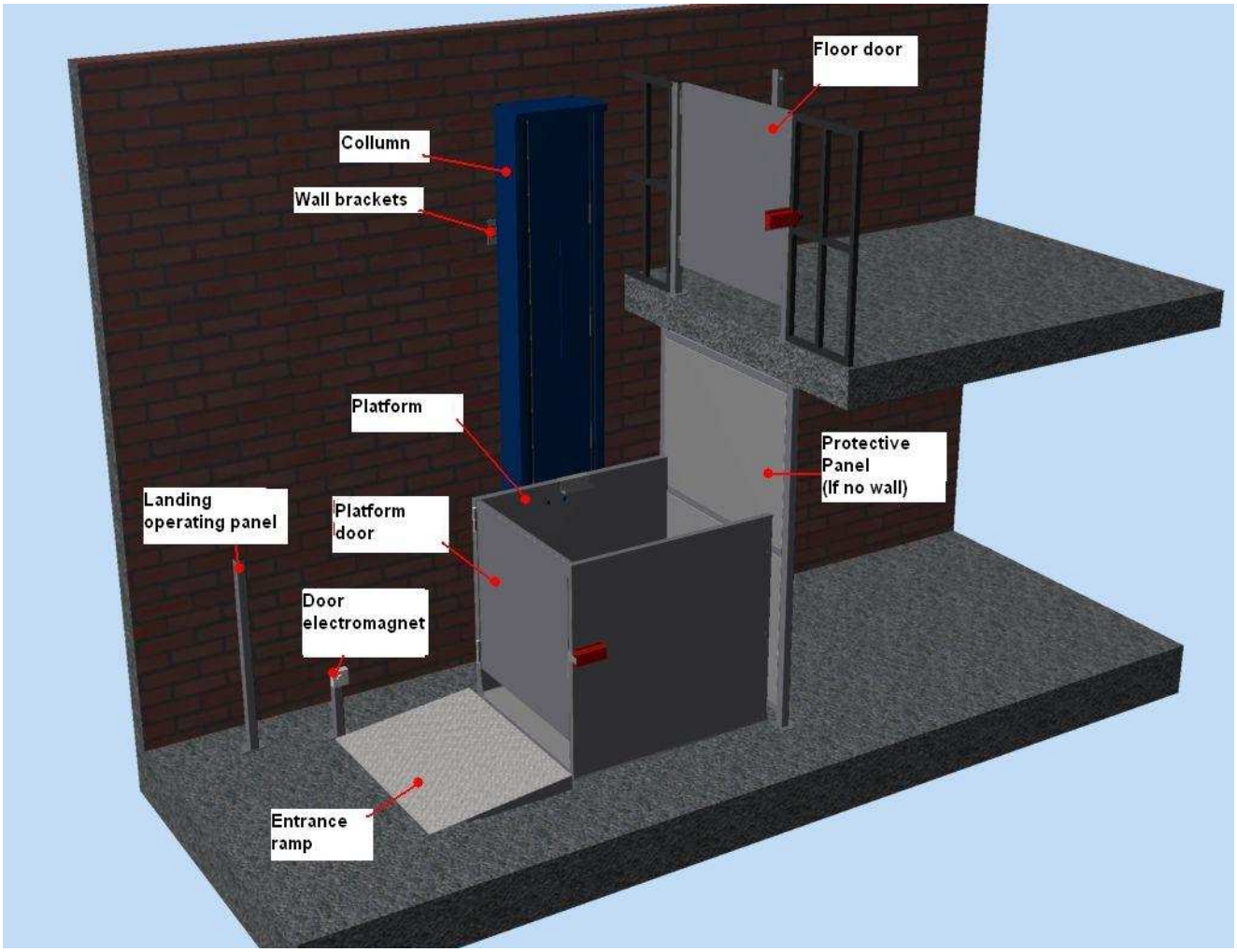
- Are all of the calls executed from the landings?

- **Platform push controls**

- Are all of the calls executed from the platform?
- Do all of the buttons function properly?

1. **Platform movement**

- Does the platform stops if it find an obstacle during descent?



5. DESCRIPTION OF THE INSTALLATION

Nr	Description
1	Frame
2	Wall fittings
3	Landing door
4	Platform
5	Protective panel
6	Platform door
7	LOP
8	Magnet
9	Ramp

Controller

The controller, electronically controls the movement of the Vertiplat mechanism. It is located inside the machine room, as well as the power unit, in which only authorized persons have access to. If there is not a separate machine room the controller and the power unit shall be locked.

Power unit

The power unit is connected to the controller and supplies special hydraulic oil to the jack , through a rubber hose of adequate strength. It is located in the machine room. If there is not a separate machine room the controller and the power unit shall be locked.
The valve block, which is adapted on the power unit, controls the oil flow to the jack and reverse.

Upward – downward movement

The jack is rising due to the supply of hydraulic oil. That in turn raises the pulley which is screwed on the upper part of the jack. Through the pulley the chains that are fastened on one end to the column of the system and on the other end to the chassis frame. The rise of the chains causes the rise of the chassis frame, which moves between the guide rails. The platform seats on the chassis frame. The downward movement is achieved through the weight of the load and the controlled oil flow from the jack to the power unit through the valve block. During the downward movement there is no power consumption. The suspension is 1:2, meaning the platform moves with double the speed of the jack.

Safety

- The over speed descend of the Vertiplat mechanism is prevented by a special line rupture valve, which stops the movement of the jack (therefore the platform as well). The pipe rupture valve will be activated if there is excessive oil flow from the jack. (Example, rubber hose rupture)
- On the chassis frame of the platform there are adapted safety gears, which stops the mechanism in case one or more chains brakes.
- The floor doors are such designed to prevent them from opening if the platform is not behind them
- During decent if the platform find an obstacle it will stop due to safety sheet metal cover under it

6. SAFE USE OF THE MECHANISM

The maximum rated load of the lifting system mechanism, which is inscribed on the certificate, should not be exceeded. It is forbidden the use of mechanism for load transport.

The floor door and the Platform doors-bars cant open if the platform is not at a landing or during accent-decent.

Depending on the temperature of the environment and the load of the lifting system mechanism, there is a possibility that the car could stop higher or lower from the landing.

Also attention should be given to the gap between the platform and the landing. Do not dispose garbage in the gap.

The passengers of the lifting system should not move unnecessarily.

It is forbidden to use the Vertiplat mechanism in dangerous situations like fire, floods, earthquakes, etc. Only trained persons or person capable for maintenance should use the key to the controller.

7. MAINTENANCE INFORMATION

Preventive measures

Only specialized technicians or properly trained persons should access the area of the movment.
No other equipment apart from the lifting system mechanism equipment should be located inside the space the platform moves.

Fire-hazard sprinklers are not allowed near the system.

Access ways (for maintenance) to the controller should always be locked. The access should remain safe at all times. If there is a potential hazard issue, the installation must be taken out of service.
The lighting and the temperature of the well should be at reasonable levels.

Cleaning

Cleaning of the metallic parts and area

The instructions below are intended to familiarize the owner with the cleaning methods for the control panel, the platform, the doors and area.

- Do not use water to clean every part of the lifting system mechanism. Water should not be allowed to flow inside the column, because there is electrical equipment present.
- Do not use detergents, which contain strong solvents or abrasives, there is a risk of damaging the surfaces.
- Use a clean white cotton cloth
- Always dry the surfaces after cleaning.

Platform

In order to clean the platform, use a damp soft cotton cloth. Do not use a rubbing wire.

Stainless steel surfaces

Use commercial available cleaning agents (with or without solvents) with a clean white cotton cloth.

If the stainless steel is colored or with patterns, use warm soapy water (not detergent). Clean and dry with a white cotton cloth.

Fault correction

Correction of faults includes the diagnosis and rectification of faults, as well as freeing of passengers in an emergency. Fault correction does not usually require components to be replaced.

Only competent persons are allowed to correct faults. As an exception, trained persons may also carry out correction of simple faults. Simple faults are considered those, which are mentioned in the § 4.7 (periodic checks by the owner).

Repairs

Repairs are defined as the procedure, which includes the replace or the repair of components that either is defective or they have worn out.
Repairs should only be performed by the maintenance organization and all the safety measures, mentioned in the maintenance information, should be followed.
It is advisable that all the components that are going to be replaced and especially the safety components should be supplied by KLEEMANN. The components that are not supplied by KLEEMANN are not designed and tested for its products.

Lubrication and hydraulic oils

In case of oil replacement the manufacturing company should approve the hydraulic oils used.

Installation logbook

Major faults and repairs should be recorder in the installation logbook (see example in Appendix A).

Examinations and tests after important modifications or after an accident

After important modifications or after an accident, a notified body must inspect the installation, to ensure that it is in compliance with the Regulations.
During inspection all the safety measures, mentioned in the maintenance information, must be followed.
After the end of the inspection, a duplicate copy of the result should be attached to the installation logbook.

Taking the installation out of service

If during maintenance it is established from the maintenance organization that there is a hazard due to a fault, which cannot be repaired immediately, or due to other factors, the installation must be taken out of service.
The maintenance organization should take the installation out of service if it is established that the safety components do not function properly or if it cannot guaranty the safe use of the vertiplat mechanism for any other reason.

1 Environmental issues / disposal of materials

Lubricants, oils and other dangerous substances, which pollute the environment, must be disposed in conformity with the regulations of each country of installation. The disposal should be done either by the owner or the maintenance organization.
Different types of fluids should not be mixed.

National Regulations requirements

Any deviation from the national regulation must be escorted with a risk assessment, which is compiled by the installer.

8. MAINTENANCE INSTRUCTIONS FOR THE MAINTENANCE ORGANIZATION

Vertiplat mechanism should be escorted by maintenance instructions, which are compiled by the installer. The maintenance should be done by a maintenance organization, which employs competent persons for maintenance (see chapter 3 Definitions).

Risk assessment

The maintenance organization must ensure that a risk assessment for the working area and for any maintenance operations has been carried out taking into account the installer's maintenance instructions and all information supplied by the owner of the installation.

Conformity with the National Regulations

The maintenance work should be done in conformity with the maintenance instructions and based on systematic maintenance checks. After these checks, the maintenance organization shall decide in conformity with the maintenance instructions what is required to be done.
The maintenance operations must be carried out by competent persons and provided with the necessary tools and equipment. Generally all work must be carried out while the mechanism is at a standstill. The maintenance persons must maintain their competency through training.
The maintenance plan of the compact mechanism should be planned so that preventive maintenance is suitable for the installation and maintenance time is as a short as reasonably practicable, without reducing the safety of persons, in order to minimize the non-operational time of the installation.
For the maintenance schedule, its necessary to define the maintenance operations and the safety measures for each one, based on a risk assessment (EN 13015 chapter 5.1).

Changes - modifications

The original maintenance instructions must be updated if the installation changes its intended use and / or the environmental conditions existing on the completion of the installation.
The maintenance organization must inform the owner of the installation about any work to be carried out as a consequence of a risk assessment especially for the access and / or the environment related to the building / installation.

The maintenance organization must inform the owner in due time about necessary progressive upgrading of the installation..

Dangerous situations – Vertiplat mechanism rescue operations

The maintenance plan should be adapted so as to take account of any predictable failures, e.g. those to misuse, mishandling, deterioration, etc.

The maintenance organization must provide a 24 h, all year round call-out service for rescue of persons.

The maintenance organization must keep records of the result of each intervention due to a failure of the installation. These records shall include the type of failures in order to detect any repetition. They shall be available to the owner on request. The maintenance organization must put the installation out of service if a dangerous situation is detected during maintenance, which cannot be eliminated immediately, and to inform the owner of the installation of the need to keep it out of service until repaired.

The maintenance organization must organize rescue operations, even with subcontractor(s), and to make provision for circumstances such as fire, panic, etc.

General information

The maintenance organization must be organized to provide the necessary spare parts for any repair. The maintenance organization must also be able to provide a competent maintenance person(s), given reasonable notice, for any and inspection carried out by an authorized third party or for building maintenance works to be carried out in the area reserved for the maintenance organization.

Maintenance schedule

The frequency of maintenance interventions is determined by the following non-exhaustive list:

- **Characteristics and use of the mechanism** (the use frequency of the mechanism, transported loads e.t.c.)
- **Age and condition of the installation**
- **Restrictions of use and risk assessment for working areas**
- **The environment where the installation is situated**
- **The maintenance instructions by the manufacturer for the safety components. For components that are not safety related and must be maintained the relevant instructions by their manufacturer.**

It must be estimated the number of trips per year and operation time per day

It must be estimated the local environment where the installation is situated, as well as external environmental elements, e.g. weather conditions (rain, heat, cold etc.) or vandalism

Below follows a typical catalog of checks for a hydraulic compact mechanism. The frequency of the checks and maintenance depends on the above factor, that's why there are no indications for the time period a check should take place.

CK POINT	CHECK DESCRIPTION
Floor level:	Check stopping accuracy at landing
Landing controls:	Check operation
Platform :	Check fixings of balustrades and door stability
	Check operation of buttons
	Check control panel – safety plate under the platform
Landing entrances:	Check of electric lock closure
	Check operation of doors
	Check the grip of electromagnet
	Check hinges rotate force
Pit area :	Check all components are clean and kept free from dust and corrosion
	Check for excess oil/grease at bottom of collumn
	Check the pit area is clean, dry and free from debris
Safety gear	Remove front cover of column and:
	Check switch
	Check operation and distance from the guides
	Check lubrication (when required)
	Check connections
	Check moving parts for free movement and wear
Chassis sliding inserts, pulley:	Check lubrication (when required)
	Check connections
	Check moving parts for free movement and wear
Chains:	Check for wear at connection points of chains
Guide rails:	Check lubrication at active surface of guides
	Check connections
Pulley (s):	Check condition and grooves for wear
	Check guarding
	Check lubrication (when required)
	Check bearings for abnormal noise and / or vibrations
Jack:	Check for oil leakage
Limit switches:	Check operation
Electric wiring:	Check insulation and fixings
	Check correct distances of wires from moving parts insight the column
Power unit:	Check hydraulic oil level
	Check tank and valve block for oil leakage
	Check manual lowering valve
	Check hand pump
	Check pressure relief valve
Controller:	Check cabinet is clean, dry and free from dust

Motor run time limiter:	Check operation
Electric safety devices:	Check operation
	Check electric safety chain
	Check correct fuses are fitted
Line rupture valve	Check operation
Hose / pipe work:	Check for damage and leakage

9. USER INSTRUCTIONS

The hydraulic vertical lifting system VERTIPLAT is designed for the vertical transportation of people with max rated load 300kg.

Min clear dimensions of the platform WIDTH 800mm LENGTH 1000mm
Type of installation: without shaft – with shaft or with partly enclosed shaft according to paragraph 5.2.1.2 of EN 81.

At the entrance of the platform we install doors with height 1100mm and semi automatic doors manual operated or bars. The doors remain open with the help of an electromagnet. When the user presses the up or down button the door closes automatically and the lock at the door is activated **EXTREME CAUTION: ALWAYS CHECK THAT THE DOOR IS SECURLY FIXED BY HAND**. Also at every stop the shaft is equipped with the same manual operated door with height 1100mm. The width of the door is the same with the width of the platform.

The platform is equipped with sensitive surface under the platform. When the platform touches an obstacle the movement of the platform is stopped. The platform can not move when a door is open and the lock is not activated. All the buttons at the Platform operated panel and at the Landing operated panel are “HOLD to RUN” type.

Instructions for the user

1. Stay in front of the platform and press the button continuously in order the platform to reach the stop. When the platform reaches the stop it stops automatically.
2. Open the door or the bar manually and secure it at the open position with the help of an electromagnet.
3. Insert into the platform (secure the wheelchair with its own wheel brake)
4. Use the platform control panel and press continuously the button of the desired floor. The door will close automatically (ALWAYS CHECH THAT THE DOOR IS CLOSED), the lock will be activated and the platform will start moving. Attention: The buttons are " Hold to Run" type.
5. When the platform reaches the desired floor it will stop automatically and you can open the door. The door may remain opened with the help of an electromagnet.
6. In order to close the door you can press the button of the landing operation panel
7. Make sure that the door is closed in its final place.

Attention: It is not allowed to use the platform in case of emergency such as fire, earthquake etc. The manual rescue operation procedure must be followed only by special trained persons or the maintenance team.
In case of malfunction press the Emergency Stop.
Call immediately the maintenance team or the Fire Service .

10.Evacuation operation instructions

On the power unit rotate the emergency lowering valve (figure 1) that is on the block of valves. Lower the platform until it reaches the next lower station. Stop pressing the evacuation button and rotating the wheel. Unscrew the cover of the electric lock (at platform door or floor door). Uptight the screw based after the red head on the lock, rotate the small switch at unlock position and open the door. (see figures 2-3 for releasing the lock)

Normal setup of lock

Setup for evacuation

Because the lack of an appropriate apron and in order to eliminate the risk of persons falling into the lift way, should always lower the platform to a landing level in order to evacuate persons.

Attention: After evacuation procedure turn electric lock back to normal use in case for accidents

10. MAINTENANCE INSTRUCTIONS FOR SAFETY COMPONENTS

GENERAL INFORMATION

The maintenance of the safety components should be done by a maintenance organization, employing specialized and trained persons, according to the instructions given by the manufacturer of the safety components. The safety components must be used for the purpose and application range that they were designed for..

The following instructions provide important information to the installer, owner and maintenance organization for the installation, maintenance and safe operation of the safety components. The instructions do not take into account National Regulations or other requirements.
The frequency of the maintenance mentioned, is for the minimum requirements. The frequency of the maintenance for each case is derived by taking into account the parameters in chapter 8.6.

Maintenance

Before every maintenance operation, ensure the safety of the work by checking the electric and mechanical parts of the compact mechanism.

Replacing safety components

The replacement of any safety component shall be registered in the log book of the machinery and the new component shall be tested.

Certification

All of the safety components must be checked at the commissioning of the installation according to machine directive 2006/42/EC.

GENERAL INSTRUCTION FOR DOOR MAINTENANCE

- On every landing check that the door is completely closed and can be opened only by the use of evacuation procedure.
- Check that the electric lock safety device is correctly located and operates properly.

- Check the safety switch of the lock prevents the platform oparating if door is open
- Check door structure for potential failures or deformations. If necessary adjust and grease the hinges.

SAFETY GEAR

Installation instructions for the safety gear are available in the installation manual of the car frame and /or in the packaging of the safety gear.

Safety gears used in hydraulic vertiplat mechanisms are only operative during descent.

Installation and testing of the safety gear should only be done after verifying that the safety gear is the appropriate one for the installation. If there are any deviations, replace with the correct safety gear. Safety gears are delivered adjusted. If there is any extra adjustments need to be done, contact the manufacturer.

Maintenance

In case of a defective product, contact the manufacturer, stating the serial number of the safety gear.

A periodic check for the correct operation of the safety gear should be performed according to (EN 81-2 chapter E).

Check

Check: The safety (when is available)

The fixings to the platform frame

The distance platform from guides (according to the installation instructions)

The operation of the safety gear switch

The connection of the gear pair

- **Cleaning**

Clean the surfaces of the safety gear when required.

The safety gear does not require lubrication. Use only certified lubricants for the guide rails.

Further instructions are given in the manual of the safety gear and / or of the platform frame, which must be kept with the current document.

Line rupture valve

The pipe rupture valve does not require maintenance. To test the line rapture valve you must separate the hose with the valve from the power unit KV1S and open the cover of oil cover. Clear the area of the platform movement and open the valve insight the tank forcing a hose breakage case. **Always Have direct sight during the valve test with the platform.** The pipe rupture valve should be checked periodically or in case of replacement.

11. APPENDIX A

A1. INSTALLATION LOGBOOK (Example, page. 1/2) (This book must be kept and updated by the owner during the life-span of the compact mechanism)	
Vertiplat mechanism description:	
Installation N⁰:	
Place of installation:	
Owner:	
Installation address:	
Certification date by notified body:	
Name of maintenance organization:	
Address & phone number of Maintenance company:	
Starting date of maintenance contract:	
Fire rescue operations, **accidents, etc.:**	

INSTALLATION LOGBOOK (Example, page. 2/2)

(This book must be kept and updated by the owner during the life-span of the compact mechanism)

Major modifications and repairs

Description of modifications / repairs	Company that carried out the modification / repair	Date of modification	Signature

Statutory inspections

Name of the person in charge of the inspection	Name of the organization in charge of the inspection	Date of the inspection	Signature

Inspections after major modifications and / or repairs

Name of the person in charge of the inspection	Name of the organization in charge of the inspection	Date of the inspection	Signature

A2. BASIC CHARACTERISTICS OF THE VERTIPLAT MECHANISM (SAMPLE)

Serial Number Nº					
Type mechanism	☐ Vertical transportation for persons				
Installer information	Name:				
	Address:				
Owner information	Name:				
	Address:				
Installation information	Installation address				
	Layout drawing Ref N^0				
a.	**CHARACTERISTICS OF THE INSTALLATION**				
Travel of platform (mm):		Maximum rated load (Kg):		Number of persons:	
Number of levels served:		Main entrance stop:		Secondary entrance stop:	
Speed (m/s):		Suspension type:			
Location of machinery:					
b.	**MAINS POWER SUPPLY**				
N^0 of phases:		Voltage (V):		Power (KW):	
Frequency (Hz):		Max current (A):			

	A3. ACKNOWLEDGEMENT OF OWNER DOCUMENTATION
Serial number:	
Installation address:	
Place of installation:	
Country:	
Date of handover:	
Owner information:	
Name:	
Address:	
Country:	

We confirm herewith the receipt of the owner's documentation by the owner.
The documentation consists of: (tick according tick box to check)

- ☐ Declaration of conformity
- ☐ Basic characteristics of the Vertiplat mechanism
- ☐ Logbook
- ☐ Plans of Vertiplat mechanism in the building
- ☐ Electric schematic diagrams
- ☐ Hydraulic diagram
- ☐ List of Vertiplat mechanism safety components
- ☐ Basic characteristics of wire ropes and / or chains
- ☐ General maintenance instructions for the mechanism
- ☐ Maintenance instructions for safety components
- ☐ Instructions for normal use of the compact mechanism
- ☐ Instructions for rescue operations

In case where the ownership of the building changes, the owner documentation has to be passed on.

Place / Date: .....

Signature of the owner: .....

Signature of the installer: .....