



On approval of the rules for the safe operation of lifts for persons with disabilities (disabled persons)

Unofficial translation

Order No. 477 of the Minister of Emergency Situations of the Republic of Kazakhstan dated September 29, 2021. Registered with the Ministry of Justice of the Republic of Kazakhstan on September 30, 2021 under No. 24567.

Unofficial translation

In accordance with subparagraph 14-7) of Article 12-2 of the Law of the Republic of Kazakhstan “On Civil Protection”, I hereby **ORDER** to:

1. Approve the attached rules for the safe operation of lifts for persons with disabilities (disabled persons).

2. In the manner prescribed by law, the Industrial Safety Committee of the Ministry of Emergency Situations of the Republic of Kazakhstan shall provide:

1) state registration of this order with the Ministry of Justice of the Republic of Kazakhstan;

2) place this order on the Internet resource of the Ministry of Emergency Situations of the Republic of Kazakhstan;

3) within ten working days after the state registration of this order with the Ministry of Justice of the Republic of Kazakhstan, report to the Legal Department of the Ministry of Emergency Situations of the Republic of Kazakhstan on execution of the actions referred to in subparagraphs 1) and 2) of this paragraph.

3. The supervising vice minister of Emergency Situations of the Republic of Kazakhstan shall be in charge of enforcement of this order.

4. This Order shall take effect sixty calendar days after the date of its first official publication.

*Minister of Emergency Situations
of the Republic of Kazakhstan*

Y. Ilyin

"AGREED"

Ministry of Industry and
Infrastructure Development
of the Republic of Kazakhstan

"AGREED"

Ministry of National Economy
of the Republic of Kazakhstan

Approved by order No. 477
of the Minister of Emergency Situations

Rules

for the safe operation of lifts for persons with disabilities (disabled persons)

Chapter 1. General Provisions

1. These Rules for the safe operation of lifts for persons with disabilities (disabled persons) (hereinafter referred to as the Rules) have been developed in accordance with subparagraph 14-7) of Article 12-2 of the Law of the Republic of Kazakhstan “On Civil Protection” (hereinafter referred to as the Law) and define the procedure for the safe operation of lifts for persons with disabilities (disabled persons) (hereinafter referred to as lifting platforms).

2. The basic concepts used in these Rules shall be applied in accordance with the legislation of the Republic of Kazakhstan in the industrial safety.

3. Installation, maintenance, technical diagnostics, technical examination and repair of lifting platforms shall be performed by organizations certified for the right to carry out installation, maintenance, technical diagnostics, technical inspection and repair of lifts for persons with disabilities (disabled) in accordance with Article 72 of the Law.

4. The lifting platforms shall be installed according to the design documentation, with regard to requirements of these Rules, national and (or) interstate standards and state regulations in the architectural, urban planning and construction activities for the installation of metal structures and lifting-transportation equipment.

5. Changes to the design of lifting platforms shall be made only after coordination of these changes with the manufacturer or design organization and the owner of the lifting platform.

6. Deviations from the requirements of the design (project) documentation, the need for which arises in the process of installation, repair, upgrading, reconstruction and operation of the lifting platform, shall be coordinated with the lifting platform owner, as well as the lifting platform manufacturer or the organization that developed this documentation.

7. Lifting platforms shall be designed and installed in accordance with national and (or) interstate standards, taking into account the possibility of maintenance and repair of all their components and parts.

8. Each lifting platform shall be supplied with operational documentation:
passport in accordance with the form in Appendix 1 to these Rules;
technical description of the design;
installation, maintenance and operation manual;
instruction manual for the owner and user.

Chapter 2 Operation of lifting platforms

9. The organization that performed the installation or reconstruction of the lifting platform shall conduct its inspection, verification and testing for compliance of the lifting platform and

its installation with the requirements of these Rules and project (design) documentation, which include:

- 1) general visual inspection with checking of the lifting platform compliance with the package of documentation under paragraph 8 of these Rules;
- 2) checking of the dimensions and correct installation of the lifting platform, including the dimensions associated with its installation;
- 3) inspection of traction elements, guides, platforms, travel and speed limiters, safety gear, condition of fences and doors, electrical equipment;
- 4) measurement of regulated distances (clearances) in the structures of the shaft, platform, landing site, doors and fences;
- 5) functional tests to verify the operation of the control system, electrical safety devices and the rated speed of the platform.

10. Upon completed repairing of the faults identified during the examination, inspections and tests, a technical readiness report shall be drawn up, as exemplified in Appendix 2 to these Rules.

11. Before using the lifting platform, the owner shall:

- 1) ensure fulfillment of the requirements established by paragraph 34 of these Rules;
 - 2) check availability and completeness of:
 - documentation provided for in paragraph 8 of these Rules;
 - protocol of inspection and testing of grounding (neutralizing) elements of the equipment;
 - report on inspection of the insulation resistance of power electrical equipment, control and signaling circuits, power and lighting wiring;
 - hidden works acceptance report;
 - technical readiness report;
 - 3) organize the work of the commission to resolve on the feasibility of putting the lifting platform into operation, consisting of:
 - chairman of the commission - representative of the owner;
 - commission members:
 - representative of the operating organization;
 - representative of the territorial unit of the authorized industrial safety body or the local executive body exercising state supervision in the industrial safety, if the lifting platform is installed at a social infrastructure facility;
- By agreement, the commission includes representatives of:
- organizations that performed installation of the lifting platform, commissioning and construction and installation works;
 - organization-manufacturer and (or) organization-supplier of the equipment.

12. The commission, formed in accordance with subparagraph 3) of paragraph 11 of these Rules, shall check the availability of the documentation specified in subparagraph 2) of

paragraph 11 of these Rules, conduct inspection and verification to the extent provided for in paragraph 21 of these Rules.

13. Based on the commission's work outcome, a report shall be drawn up on the feasibility of putting the lifting platform into operation, as exemplified in Appendix 3 to these Rules.

14. In the passport of the lifting platform, the person in charge of serviceability and safe operation of the lifting platform shall make a record of the lifting platform commissioning, indicating the date of its commissioning.

15. After putting the lifting platform into operation, the operating organization shall register the lifting platform in accordance with the Rules for the registration and deregistration of hazardous production facilities and hazardous technical devices, approved in accordance with subparagraph 14-3) of Article 12-2 of the Law.

16. Operation of the lifting platform shall be carried out in accordance with these Rules and operational documentation.

17. Production control over the safe operation of the lifting platform shall be organized and carried out in accordance with the Instructions for the organization and implementation of production control at a hazardous production facility, approved by order No. 315 of the Minister of Emergency Situations of the Republic of Kazakhstan dated June 24, 2021 (registered in the Register of State Registration of Regulatory Legal Acts under No. 23276).

18. The organization operating the lifting platform shall provide its serviceable condition and safe working conditions by organizing maintenance, technical inspection and repairs.

Technical inspection shall be carried out by the lifting platform owner in the presence of a certificate in the field of industrial safety for the right to perform technical inspection of lifts for persons with disabilities (disabled persons), provided for in Article 72 of the Law.

It is allowed to conduct technical inspection of a lifting platform on the basis of a contract by organizations certified for the right to perform technical inspection of lifts for persons with disabilities (disabled people) in accordance with Article 72 of the Law.

Methods of control and diagnostics applied in the operation of the lifting platform, or its technical inspection shall be indicated in the operating manual of the lifting platform.

19. During operation, the lifting platforms shall undergo technical inspection at least once every 12 months, as well as after manufacture (installation), reconstruction (upgrades) and overhaul.

20. During the technical inspection, the following shall be carried out:

verification of operational documentation;

checking of the technical condition of the equipment by inspection and measurements;

static and dynamic tests.

21. When inspecting the lifting platform, the condition of the equipment and its fastenings, ropes, chains, electrical wiring, shaft fencing and the drive shall be checked, as well as compliance of the lifting platform installation with the installation drawing.

22. When checking the lifting platform with an unloaded load-carrying device, work shall be controlled of:

the winch;

platform and shaft doors, seat belts, barriers, sensitive safety edges (platforms), safety devices, except for those checked during the dynamic test of the platform;

control systems;

signaling and lighting;

hydraulic drive (run and pressure of the working fluid) of the lifting platform with hydraulic drive.

23. For a hydraulically operated lifting platform, the tightness of the hydraulic system and the safety valve operation shall be checked by a static test. During the static test, an evenly distributed load is placed on the load-carrying device, the mass of which 25% exceeds the rated load capacity of the lifting platform.

24. During dynamic testing of the lifting platform, its mechanisms shall be checked in operation, buffers (stops), safety devices, brakes and speed limiters are tested, and the accuracy of stopping the platform is also checked.

The test, with the exception of checking the platform stopping accuracy, must be carried out with a load evenly distributed over the floor on the platform, the mass of which exceeds the load capacity of the lifting platform by 10%.

Checking of the platform stopping accuracy shall be carried out at the movement in each of the directions of an empty platform and platform with a load, the mass of which is equal to the carrying capacity of the lifting platform.

On the end landing (loading) sites, the accuracy of the stop is checked when the lifting platform moves in the direction of these sites. The stop accuracy is checked after the platform stops automatically.

25. Testing of buffers (stops) shall be carried out at the operating speed of the lifting platform.

The results of the buffer (stop) test are considered unsatisfactory if residual deformations or breakages are found on them.

26. The braking system is tested by turning off the power supply of the electric motor and the brake with the lifting platform moving down at the rated speed, in which the load is placed with a mass that is 25% higher than the rated load capacity of the lifting platform.

27. The tested safety gear stop and hold on the guides the load-carrying device (counterweight) moving down with a load, the mass of which corresponds to the carrying capacity of the lifting platform.

28. The safety gear, actuated from the speed limiter, must be tested without breakage and with imitation of traction elements breakage.

29. The safety gear driven by the device triggered by breakage or slack of all the traction elements are tested from the action of this device.

30. The safety gear actuated from the speed limiter and from the device triggered by breakage or slack of all the traction elements must be tested independent of each of the drive devices.

31. The speed limiter shall be tested for actuation at the speed corresponding to the speed of the platform movement specified in the operational documentation, as well as for its ability to actuate the safety gear when the speed limiter rope is on the working pulley.

32. Based on the technical inspection results, the operating organization shall make a decision on the possibility of further operation of the lifting platform or on carrying out repairs or restoration work and approve it by its order.

33. A record of the technical inspection results shall be made in the passport of the lifting platform, indicating the date of the next examination by the person in charge of serviceability and safe operation of the lifting platform.

34. The organization operating the lifting platform shall:

appoint persons in charge of the production control over compliance with industrial safety requirements during the lifting platform operation;

appoint persons in charge of the maintenance of the lifting platform in good condition and for its safe operation;

assign personnel for maintenance and repair;

organize periodic inspections, maintenance and repairs of lifting platforms;

provide training and periodic testing of knowledge in the field of industrial safety of the personnel engaged in the maintenance and repair of lifting platforms;

organize the procedure for storing and accounting for the issuance of keys to the rooms and cabinets in which the equipment of lifting platforms is stored;

provide persons in charge of production control over compliance with industrial safety requirements during the lifting platforms operation, in charge of serviceability and safe operation of lifting platforms, with regulatory legal acts establishing industrial safety requirements, and the personnel -with technological regulations;

ensure that the persons in charge of production control over compliance with industrial safety requirements during the operation of lifting platforms, in charge of serviceability and safe operation of lifting platforms, comply with the requirements of these Rules, and the personnel - with technological regulations.

35. Training and retraining in the industrial safety of persons in charge of production control over compliance with industrial safety requirements, in charge of serviceability and safe operation of lifting platforms, of the personnel shall be carried out in accordance with the Rules for the training, retraining and testing of the knowledge of specialists, professionals in industrial safety , approved by order No. 332 of the Minister of Emergency Situations of the Republic of Kazakhstan dated July 9, 2021 (registered in the Register of State Registration of Regulatory Legal Acts under No. 23461) (hereinafter referred to as the Training Rules).

36. Maintenance and repair of lifting platforms shall be performed by an electrician and an operator in accordance with the operation manual or maintenance manual for lifting platforms.

It is allowed to carry out maintenance and repair of lifting platforms on the basis of a contract by organizations certified to carry out maintenance and repair of lifts for persons with disabilities (disabled people) in accordance with Article 72 of the Law.

37. The list of malfunctions of lifting platforms, as well as other reasons for which the operation of lifting platforms is prohibited, shall be indicated in the operation manual or in the maintenance manual, and also in the technological regulations for the electrician and the operator.

38. The operation of lifting platforms is not allowed in the following events:

- non-compliance of the design of lifting platforms, its elements, components and premises with the requirements of these Rules;
- presence of malfunctions affecting the safe operation of lifting platforms that cannot be eliminated during the inspection, testing or technical certification;
- expiration of the designated operation term;
- expired technical inspection term;
- failure to perform maintenance;
- malfunctions of safety devices;
- presence of cracks in metal structures and equipment elements;
- absence of personnel who have passed the knowledge test in accordance with the Training Rules for the inspection and maintenance of lifting platforms.

39. Putting the lifting platform into operation after major repairs, as well as at the end of the operation period established by the previous technical inspection, shall be carried out after inspection and verification in the technical inspection scope.

40. Maintenance shall comprise inspection, lubrication, wear measurement, cleaning, adjustment and replacement of components and parts based on the inspection and measurements results.

41. Maintenance shall be carried out within the time frames specified in the operation manual or in the maintenance manual for the lifting platform.

42. Lifting platforms that have worked out their standard service life are subject to a technical condition survey in order to determine the possibility of their further operation by organizations certified for the right to conduct inspection in the industrial safety in accordance with Article 72 of the Law.

Appendix 1
to the rules for the safe operation
of lifts for persons with disabilities
(disabled persons)

Passport of the lift with vertical (inclined) movement

When transferring the lift to another owner, this passport is transferred along with the lifting platform.

Name of the manufacturer (supplier), address

List of documents included in the lift passport

Name of the document	Document index	Number of sheets
Installation drawing		
Schematic diagram with a list of circuit elements		
Schematic hydraulic diagram with a list of circuit elements		
Other documents in accordance with the requirements of regulatory and technical documentation		

1. General information

Manufacturer	
Type and model of the lifting platform	
Serial number	
Date of manufacture	
Drive (electric, hydraulic)	
Execution (national and (or) interstate standard)	
Environment in which the lifting platform can be operated (temperature, relative humidity, precipitation ingress)	
Main regulatory and technical documents in accordance with which the lifting platform is made (their designation and name)	

2. Main technical characteristics 2.1. General information

Load capacity, kg	
Rated speed of the lift, m/s	
Number of transported users at the same time (including accompanying person)	
Possibility to transport the user in a wheelchair	
Type of handling	
Number of stops	
Inclination angle horizontal (vertical)	
Lifting height, m	
Length of the load-carrying device route (for lifts with inclined movement)	

	Type of the current	Voltage, V; Permissible deviation from the nominal, % (\pm)	Frequency Hz
On the input device when the lifting platform is not working			
Power circuit		in normal mode	
		when starting the engine	
Control circuit			
Lighting circuit for: maintenance shaft platform			
Signaling circuit			

2.2. Winch

Type (geared, without gearbox, with traction sheave, drum reel, with sprocket etc.)	
Serial number	
Year made	
Rated output shaft torque, Nm	
Diameter of traction sheave, drum, sprocket, mm	
Weight, kg	

2.2.1. Gearbox

Type	
Serial number	
Year made	
Gear ratio	
Distance between axes, mm	
Weight, kg	

2.2.2. Brake

Type (drum, disc, conic)		
Diameter of brake pulley, mm		
Brake drive	Type	
	Force, kN (kgf)	
	Motion of operative device, mm	

2.3. Electric engines

Purpose		
Type		
Type of current		
Voltage, V		

Rated current, A		
Frequency Hz		
Power, kWt		
Permissible overheating of the motor windings °C (insulation class)		
Rotation frequency, rpm		
PV (%)		
Number of starts per hour		
Execution (normal, moisture-proof, dust-water-proof, marine) with indication of protection degree		
Weight, kg		

2.4. Hydraulic drive

Type	
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2.4.1. Hydraulic cylinder

Type	
Number	
Serial number	
Year made	
Diameter of rod piston plunger, mm	
Stroke, mm	
Working pressure, MPa lowest maximum test pressure, MPa	
Speed, m/s at lifting, not less than at lowering, not more	
Weight, kg	

2.4.2. Hydraulic unit

Type	
Serial number	
Year made	
Maximum working fluid flow, dm ³ /min	
Working fluid	
Filling volume, dm ³	
Safety valve setting pressure, MPa	
Test pressure, MPa	
Weight, kg	

2.4.3. Piping

High pressure hoses (type)	
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2.5. Shaft doors

Design (swing, sliding, combined, one-, two- or multi-wing)	
Doorway size (width height), mm	
Opening or closing method (manual, semi-automatic, automatic)	
Drive (electric, hydraulic, pneumatic, spring)	
Method of shaft door unlocking when the platform stops at the landing (loading) site level (fixed, movable shifting device)	
Method of opening shaft door in the absence of a platform at the landing (loading) site level	

2.6. Platform

Internal dimensions, mm width depth height	
Doors design (swing, sliding, single, double or multi-wing)	
Doors opening or closing method (manual, semi-automatic, automatic)	
Drive of the doors (electric, hydraulic, pneumatic, spring)	
Type of platform (passable, non-passable)	
Weight, kg	
Seat belt (available/not available)	
Barrier (available/not available)	

2.7. Counterweight

Weight, kg (assembled)	
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Note:

The number of loads is indicated in the documentation supplied with the lift.

2.8. Ropes

	of the Platform	Counterweight	Speed limiter	Balancing
1	2	3	4	5
Type				
Design				
Symbol according to the standard				
Diameter, mm				

Number of ropes				
Length of one rope, including the length required for fastening, m				
Breaking force of the rope as a whole, N (kgf)				
Safety factor				
The table is filled out according to the certificates of the manufacturer of the ropes. To be filled out for traction ropes and speed limiter ropes.				

2.9. Chains

	of the Platform	Counterweight	Speed limiter	Balancing
Type				
Symbol according to the standard				
Chain pitch, mm				
Number of chains				
Length of one chain, m				
Breaking load of the chain, N (kgf)				
Safety factor				

Note:

The table is filled out according to acceptance tests report of the chain manufacturer.

The safety factor is filled out for traction chains and speed limiter chains.

2.10. Safety devices

2.10.1. Mechanical devices

		Platform	Counterweight
Safety gear	Type (sharp, combined)		
	Actuated (from speed limiter, from the device triggered by a slack of all traction ropes)		
	Conditions of safety gear test (platform speed, counterweight, platform loading)		
	Permissible braking path for safety gear, mm maximum minimum		
	Type (centrifugal, pendulum)		

Speed limiter	Platform (counterweight) movement speed at which the speed limiter is activated, m/s maximum minimum		
	Force on the speed limiter rope from the tensioner, kN (kgf)		
Buffer	Type		
	Number		

2.10.2. Safety switches

Shaft door closing	
Automatic lock of shaft door	
Non-automatic shaft door lock	
Shaft maintenance opening	
Pit door closing	
Speed limiter	
Safety gear	
Slack of haul ropes (chains)	
Speed limiter of rope tensioner	
Pressure sensor (hydraulic lifting platform)	
Other safety switches applied in the lifting platform	

Note:

Specify “available” or “not available”.

2.10.3. Limit switches

Broken chain (power, control)	
Actuation method	

3. Loads during the full technical inspection

Name	Load amount
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4. Acceptance certificate

The lift

(name, type, code,) is manufactured in accordance with regulatory documents

and is found fit for work with characteristics indicated in the passport.

Date of manufacture _____

Persons responsible for acceptance _____

(signature, date) Seal (if any)

5. Warranty

5.1. Warranty statement of the **manufacturer**

(name of the manufacturer organization) guarantees compliance of the lift with design documentation requirements subject to the conditions of transportation, storage, installation and operation.

Warranty term of the lift __ from the date of commissioning (years, months)

Chief engineer of the manufacturer organization _____

Seal (if any) (date)

5.2. Warranty of the organization that performed installation (reconstruction) of the lift _____ guarantees

(name of the organization that installed the lift)

compliance of the lift installation with technical documentation requirements for installation and successful operation of the lift pertaining to its installation, subject to observance of operation conditions by the owner.

Warranty term of the lift _____

from the date of signing (years, months) of the report of technical readiness and acceptance of the lift.

Authorized representative of the organization that performed installation (reconstruction) of the lift

Seal (if any) (date)

6. Information on the lift location

name of the organization-owner of the lift	Installation place of the lift (city, street, house, building, entrance)	Date of the lift installation

(two pages)

7. Person in charge of serviceability and safe operation of the lift

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Date and No. of the assignment or appointment order	Position, full name	Signature of the authorized person
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(two pages)

8. Information on maintenance and upgrade of the lift

Date	Information on maintenance and reconstruction	Signature of the authorized person
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Note:

Documents confirming the quality of the newly installed lift structural elements are stored together with the lift passport.

(at least twenty pages)

9. Record of technical inspection results

Date of inspection	Inspection results	Date of next inspection
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10. Registration

The lift is assigned No. _____ in _____

(name of the body)

The passport has _____ pages numbered and _____ sheets laced, including drawings on _____ sheets

(position) (signature) (print full name)

" _ " _____ 20 __.

Seal (if any)

Note:

The standard-form passport is a model on which the manufacturer develops the passport applicable to the type of lift produced, entering into it the information contained in this sample, information regarding this type of lift.

If necessary, the manufacturer enters into the passport additional specifics of the manufactured lift.

Appendix 2
to the rules for the safe operation
of lifts for persons with disabilities
(disabled persons)

Form

Technical readiness report

City _____ " " _____ 20__.

We, the undersigned, representative of the organization, that performed installation (reconstruction) of the lift

(name of the organization, position, full name,
installation permit _____ No. _____
(day ,month, year)
issued _____

→
(by whom) and representative of the organization that performed installation and commissioning

(name of the organization, position, full name),
have drawn up this report stating completion of the installation and commissioning works.
The lift was inspected, checked and tested
_____ serial number _____
(type) and its component parts

(name and symbols of component parts)

to the extent provided for by the manufacturer's technical documentation.
The lift is installed at the address: _____

The lift and its component parts have been inspected and tested, passed the tests,
are in serviceable condition and ready for their intended use.
Representative of the organization that performed installation (reconstruction) of the lift

(signature) (print full name)

Form

Report on the lift commissioning feasibility

City _____ " __ " _____ 20__ .

We, the undersigned, commission members: authorized representative of the
lift owner - chairman of the commission

—
(name of the organization, position, full name)
authorized representative of the operating organization

—
(name of the organization, position, full name)
authorized representative of the commissioning organization

—
(name of the organization, position, full name)
authorized representative of the organization that performed the lift installation (
reconstruction)

—
(name of the organization, position, full name)
authorized representative of the construction and installation organization

—
(name of the organization, position, full name)

—
authorized representative of the organization – lift manufacturer

—
(name of the organization, position, full name)
state body representative exercising industrial safety supervision

—
(name of the organization, position, full name)

have drawn up this report stating that the submitted documentation was reviewed, the lift and its components were inspected and checked to the extent provided for by the manufacturer's technical documentation and the Rules for the safe operation of lifts for persons with disabilities (disabled), approved in accordance with subparagraph 14-7 of Article 12-2 of the Law of the Republic of Kazakhstan On Civil Protection (further-the Rules).

The lift is installed at the address:

Inspection and verification established that: construction, installation and commissioning works have been performed in accordance with

(designation of technical condition) working technical documentation, installation drawings

and the Rules; the lift complies with the passport data and the requirements specified in the Rules;

the lift is in serviceable condition, enabling the safe use for its intended purpose;

the operating organization complies with the requirements of the Rules.

The lift is accepted by the owner.

Signatures of the commission members.