Republic of Latvia

Cabinet Regulation No. 359 Adopted 28 April 2009

Labour Protection Requirements in Workplaces

Issued pursuant to Section 25, Clause 1 of the Labour Protection Law

I. General Provisions

1. These Regulations prescribe the health and safety requirements for workers in workplaces.

2. These Regulations, excluding Paragraph 29, Annexes 3 and 4, shall not apply to workplaces:

- 2.1. in automotive, river, sea, air and railway vehicles;
- 2.2. in mineral-extracting industries;
- 2.3. in fishing vessels;

2.4. in agriculture and forestry undertakings, if the workplaces are not located in the buildings of these undertakings; or

2.5. temporary and mobile workplaces, including on construction sites.

3. These Regulations do not prescribe the requirements for the safety and health protection of workers in workplaces in emergency situations and catastrophes.

4. Employer shall be responsible for compliance with these Regulations.

5. Compliance with these Regulations shall be controlled by the State Labour Inspectorate.

II. Requirements for Safety and Health Protection for Workers

6. The requirements specified in this Chapter shall be applied, taking into account the specific nature of the workplace, nature of the work, working conditions and working environment risk.

7. Requirements for the strength and stability of buildings in which workplaces are located, shall be determined by the regulatory enactments regulating the field of construction.

8. Electric appliances shall be designed, installed and maintained so as:

8.1. not to present a fire or explosion hazard;

8.2. to protect workers from electrical trauma caused by direct or indirect contact with an electrical appliance; and

8.3 materials and protection devices conform to the voltage, working conditions and competence of the workers who have access to electrical appliances or parts thereof.

9. Emergency routes and exits shall be designed, constructed and maintained in compliance with the following requirements:

9.1. emergency routes and exits, as well as doors leading to them, and routes in the territory of the undertaking (hereinafter – traffic route) shall be clear so that a safe area may be reached as quickly as possible;

9.2. emergency routes and exits shall ensure rapid and as safe as possible evacuation of workers from all workplaces in case of danger;

9.3. emergency doors shall open outwards;

9.4. emergency doors shall not be locked or fastened in such a way that they may not be easily opened while workers are present;

9.5. emergency routes and exits shall be marked in accordance with the requirements for the use of safety signs at workplaces (inside);

9.6. the number, location and size of emergency routes and exits shall be determined depending on the number, layout and size of the workplaces, as well as on the maximum potential number of workers; and

9.7. emergency routes and exits where illumination is necessary shall be equipped with emergency lighting of sufficient intensity.

10. Workplaces shall be provided with easily accessible, simple to use and suitable fireextinguishing installations (if possible, automatic), automatic fire-alarm systems, firedetectors and fire-fighting devices in adequate quantities, taking into account the dimensions and purposes for use of the building, work equipment, physical and chemical properties of the substances used and the maximum possible number of workers.

11. The equipment, systems and devices referred to in Paragraph 10 of these Regulations shall be regularly inspected and maintained in order, and location places thereof shall be indicated with signs which shall be placed in accordance with the regulatory enactments regarding labour protection requirements for the use of safety signs.

12. In planning, organising and maintaining a territory, the following requirements shall be complied with:

12.1. the territory shall be, as much as possible, planted with greenery, and shall have well-organised traffic routes;

12.2. waste shall be collected, sorted and temporarily stored in specially arranged places; and

12.3. warehouses for fine (powder-like) materials shall be located at a distance of least 25 metres from other buildings (if the size of the territory of the undertaking allows this).

13. Requirements regarding ventilation of enclosed workrooms:

13.1. a supply of fresh air shall be ensured, taking into account the nature of the work and the physical load of workers;

13.2. the concentration of those chemical substances or products, which may cause or causes a hazard to the health of workers in the work environment and, when coming into contact with a human body, may cause an injury, occupational disease or other health disorders (hereinafter – chemical substance), shall not exceed the maximum permissible concentration of chemical substances and chemical products in the air of the work environment in accordance with the regulatory enactments regarding labour protection requirements, when coming into contact with chemical substances in workplaces;

13.3. air-conditioning or ventilation systems shall be maintained in good order, regularly cleaned and the efficiency of their operation shall be inspected;

13.4. a ventilation control system which detects disturbances in the operation of the ventilation system shall be installed (if such control system is necessary in order to ensure the safety and health protection of workers);

13.5. the operation of mechanical ventilation systems and air conditioning equipment shall not cause draughts, that exceed the permissible air movement rate;

13.6. in installing supply-exhaust ventilation and air heating, air re-circulation of not more than 90% the total air supply volume shall be permitted. Air re-circulation from premises in which work involves chemical substances, chemical products, asbestos, bacteria, viruses, radioactive substances, as well as from premises in which work presenting a fire risk or an explosion risk is performed is prohibited;

13.7. if, by utilising technical means, it is not possible to prevent or reduce the concentration of chemical substances to occupational exposure limit value for chemical substances, local exhaust ventilation shall be installed in the workplaces where chemical substances are discharged in the air in order to prevent chemical substances from entering the respiratory organs of the workers, as well as neighbouring workplaces and the surrounding environment; and

13.8. ventilation system shall be connected with fire-alarm systems or fireextinguishing equipment, so that, in case of fire, the ventilation is switched off and the fire does not spread to other premises.

14. Production waste and chemical substances or chemical products that may pollute the air of the working environment or atmosphere as a whole and pose a danger to the safety and health of the workers, shall be stored and managed in accordance with the requirements specified in the regulatory enactments regarding the management of hazardous waste.

15. Requirements regarding the microclimate of premises:

15.1. a microclimate (temperature, relative air humidity, air movement rate) of work premises that conforms to the nature of the work and the physical load of workers shall be ensured, depending on the physical load necessary for the performance of the relevant work (Annex 1):

15.1.1. Category I – work is not associated with physical efforts or requires very slight or slight physical efforts;

15.1.2. Category II – work which is associated with medium or great physical efforts; and

15.1.3. Category III – heavy work.

16. Requirements regarding the lighting of premises:

16.1. workplaces shall be ensured with natural lighting and equipped with artificial lighting in such a way that the total lighting is adequate for the safety and health of workers, taking into account Annex 2 to these Regulations;

16.2. lighting devices in workrooms and passages shall be located so as to protect workers from risk of accidents and occupational diseases that are related to insufficient lighting;

16.3. workplaces where harm to the safety and health of the workers may arise as a result of sudden switching off of light, shall be provided with sufficient emergency lighting; and

16.4. lighting devices shall be serviced and cleaned regularly.

17. Windows and skylights shall be designed, installed and maintained in compliance with the following requirements:

17.1. windows, skylights and glass partitions shall allow for avoidance of excessive effects of sunlight in workplaces, taking into account the specific nature of the work and the workplace;

17.2. workers shall have the possibility of opening, closing, adjusting or fixing windows, skylights and ventilation openings in a safe manner;

17.3. open windows, skylights or ventilation openings shall not pose danger to the workers; and

17.4. windows and skylights shall be designed together with the equipment for their cleaning, or shall be fitted with devices that allow cleaning of them without exposing to risk the workers carrying out such work or who are present in the proximity of the windows.

18. Floors, walls, ceilings and roofs of the premises shall be designed, constructed and maintained in compliance with the following requirements:

18.1. the floors of the premises shall be stable; they may not be slippery or have dangerous bumps, holes or slopes that may endanger the safety and health of workers;

18.2. workplaces shall have sufficient thermal insulation, taking into account the nature of the work and the physical load of workers;

18.3. the floors, walls and ceilings in the premises shall be easy to clean or refurbish in conformity with the hygiene requirements;

18.4. transparent or translucent walls (in particular all-glass partitions in work rooms and in proximity to traffic routes) shall be clearly marked and made of safe material or demarcated in such a way as to prevent the workers from running into walls or injuries in case the walls shatter; and

18.5. measures shall be taken in order to prevent the performance of work on or access of workers to roofs that are made of insufficiently durable materials or may otherwise endanger the safety and health of workers, unless such equipment is provided which allows carrying out the work in a safe manner.

19. The stairs existing in work places shall be maintained in working order and shall allow the freedom of movement. They shall not be slippery or have dangerous bumps, holes or slopes that may endanger the safety and health of workers. If necessary, stairs shall be marked with safety signs in accordance with the regulatory enactments regarding the labour protection requirements in the use of safety signs.

20. Doors and gates shall be designed, constructed and maintained in compliance with the following requirements:

20.1. the location, number and dimensions of doors and gates, and the materials used therein, shall be determined by the specific nature and use of the premises;

20.2. transparent doors shall be labelled at a conspicuous height;

20.3. revolving doors and gates shall be transparent or have translucent elements;

20.4. transparent or translucent parts in doors and gates, which are not made of durable material or may otherwise pose a risk of incurring injuries or traumas, shall be protected against breakage;

20.5. sliding doors shall be fitted with a safety device that prevents them from derailing and falling over;

20.6. doors and gates opening upwards shall be fitted with a mechanism that prevents such doors and gates from falling down;

20.7. doors opening to emergency routes and exits shall be marked by safety signs and can be opened from the inside at any time without assistance;

20.8. doors for pedestrians shall be installed in proximity to the gates intended for vehicles, if it is not possible to ensure the passage of pedestrians through such doors;

20.9. doors for pedestrians shall be clearly marked and unobstructed;

20.10. the operation of mechanical doors and gates shall not endanger workers, the doors and gates shall be fitted with easily identifiable and accessible emergency shut-down devices, which allow them to be opened if the doors and gates do not open automatically due to the failure of the power supply;

20.11. gates intended for vehicles shall be marked with warning colours from the inside; and

20.12. emergency doors may not be sliding doors or revolving doors.

21. Traffic routes and areas in which the life or health of workers may be endangered (hereinafter – danger area) shall be designed, organised and maintained in compliance with the following requirements:

21.1. traffic routes shall be located in such a manner as to ensure easy and safe access for pedestrians and vehicles to the routes, as well as not to pose danger to the workers employed in proximity to such traffic routes;

21.2. pedestrian walkways and traffic routes shall conform to the maximum possible number of users;

21.3. if traffic routes are used both by vehicles and pedestrians, pedestrian walkways shall be installed or a safety clearance shall be left for pedestrians, ensuring also safe access to doors or gates, passages for pedestrians, corridors and staircases;

21.4. traffic routes shall be clearly indicated and marked;

21.5. if there are danger areas at workplaces where, due to the specific nature of the work, a risk exists for workers to fall or be injured by falling objects, such places shall be fitted with devices preventing unauthorised entrance of workers into such areas;

21.6. workers who work in danger areas shall be provided with collective or personal protective equipment; and

21.7. danger areas shall be clearly indicated and marked with safety signs in accordance with the regulatory enactments regarding the labour protection requirements in the use of safety signs.

22. Workplace escalators and travelators shall function safely and shall be fitted with safety devices, as well as with easily identifiable and accessible emergency shut-down devices.

23. Loading ramps and platforms shall be designed, constructed and maintained in compliance with the following requirements:

23.1. they shall comply with the dimensions and loading weight of the freight to be transported;

23.2.they shall have at least one exit point;

23.3. if technically possible and necessary, taking into account the labour protection requirements and the platform length, two exit points shall be created; and

23.4. they shall be fitted so as to protect workers from falling from them.

24. Work premises shall be designed, installed and maintained in compliance with the following requirements:

24.1. they shall be sufficiently spacious, high and with adequate air space; and

24.2. free and unused work room space at a workplace shall provide workers with sufficient freedom to move in order to perform their work, but if it is not possible due to the specific nature of the workplace, each worker shall be provided with sufficient freedom to move in the immediate proximity of his or her workplace.

25. Rest areas shall be designed, constructed and maintained in compliance with the following requirements (need not be applied to offices and similar workplaces if there are adequate opportunities for rest during interruptions of work):

25.1. they conform with the specific nature of the work and the number of workers, are comfortable and accessible;

25.2. they shall be sufficiently spacious and have a sufficient number of tables and seats with backrests; and

25.3. if due to the specific nature of work frequent and regular breaks are necessary, but rest rooms have not been installed, there shall be other rooms in which employees can stay during breaks.

26. Changing rooms and lockers shall be designed, installed and maintained in compliance with the following requirements:

26.1. changing rooms shall be installed if wearing of special working clothes is intended in the work process or if such rooms are necessary for reasons of health or politeness;

26.2. changing rooms shall be easily accessible, sufficiently spacious, and equipped with seating and lockers;

26.3. separate changing rooms shall be provided for men and women or, if it is not feasible, separate use of changing rooms shall be ensured for men and women;

26.4. if working conditions are related to the exposure to harmful substances, as well as humidity or dirt, storage of the workers' personal clothing and working clothes in separate lockers shall be provided;

26.5. air exchange or ventilation shall be provided in lockers for storing personal clothing and working clothes, if it is determined by the employer or the trusted representatives of workers; and

26.6. if changing rooms are not installed in accordance with Sub-paragraph 26.1 of these Regulations, each worker shall be provided with a separate (lockable) place for storage of his or her personal clothes and belongings.

27. Showers, washbasins and lavatories shall be designed, installed and maintained in compliance with the following requirements:

27.1. shower rooms shall be installed taking into account the nature of the work to be performed or if it has been determined by the employer or the trusted representatives of the workers. If possible, separate shower rooms for men and women shall be installed. If it is not possible, use of shower rooms shall be ensured separately for men and women;

27.2. shower rooms shall be sufficiently spacious so that they can be used in accordance with the hygiene requirements and without hindrance to others;

27.3. showers shall be equipped with a supply of hot and cold running water;

27.4. if showers are not installed in accordance with Sub-paragraph 27.1 of these Regulations, suitable washbasins with a supply of hot and cold running water shall be installed in the proximity of the workrooms and the changing rooms;

27.5. in the cases referred to in Sub-paragraph 27.4 of these Regulations, if necessary, washbasins shall be demarcated or used separately by men and women;

27.6. if shower rooms or washbasins are installed separately from changing rooms, easy passage from one room to another shall be ensured;

27.7. the number of lavatories and washbasins shall be sufficient, taking into account the number of workers. The relevant rooms shall be provided with the necessary personal hygiene products (toilet paper, soap, towels or devices for hand drying);

27.8. lavatories and washbasins shall be installed near workrooms and rest rooms, changing rooms and shower rooms;

27.9. lavatories and shower rooms shall be equipped with ventilation and the operation thereof shall be ensured; and

27.10. separate lavatories for men and women shall be installed or separate use thereof shall be ensured, as well as, if necessary, a separate cabin shall be installed for handicapped persons.

28. On the basis of a working environment risk assessment, an employer shall evaluate the need to install first aid rooms or places and, taking into account the type of operation, the dimension of the undertaking premises, the number of workers in the undertaking, the frequency of accidents and the hazard of the working environment to the safety and health of workers, shall design, install and maintain one or more first aid rooms or places in compliance with the following requirements:

28.1. first aid rooms or places shall be equipped with the minimum medical materials required for the provision of first aid, first aid equipment and devices;

28.2. easy accessibility with stretchers shall be ensured to the first aid rooms or places;

28.3. the first aid rooms or places are clearly marked in accordance with the requirements for the use of safety signs at workplaces; and

28.4. first aid kits shall be available at all workplaces if it is necessary due to the working conditions, and the location thereof shall be indicated with appropriate safety signs.

29. Workplaces outdoors shall be designed, organised and maintained in compliance with the following requirements:

29.1. workplaces, traffic routes and other areas or installations outdoors which are used in the course of work or where workers are present, shall be organised so that pedestrians and vehicles may move in a safe manner;

29.2. the requirements referred to in Paragraphs 21, 22 and 23 of these Regulations shall also apply to traffic routes leading to specific workplaces and to routes used for the regular maintenance and supervision of installations and loading platforms;

29.3. the requirements referred to in Paragraph 20 of these Regulations shall also apply to workplaces outdoors;

29.4. if necessary, workplaces outdoors shall be equipped with artificial lighting, ensuring the level of lighting in accordance with Annex 3 to these Regulations;

29.5. workers shall be protected against unfavourable weather conditions and from falling objects;

29.6. workplaces shall be ensured against slipping and falling of workers but, if it is not possible, workers shall be ensured with appropriate protective devices;

29.7. workers shall have the possibility to rapidly leave workplaces in cases of accident or fire, or in other situations dangerous to health and life, as well as they shall be ensured with rapid assistance;

29.8. workers shall not be exposed to noise that exceeds the permissible noise level which is specified in the regulatory enactments regarding the labour protection requirements for the protection of workers from risk caused by noise, as well as harmful external influences, including gases, steam, dust and other harmful factors of the working environment;

29.9. workers shall be ensured with appropriate living and rest rooms, which may be heated and where workers have the opportunity to rest, taking into account the requirements referred to in Annex 4 to these Regulations, or the opportunity for warming up shall be ensured. These norms shall not apply to extraordinary circumstances, as well as to works related to rectification of the damage caused by natural disasters; and

29.10. workers shall be ensured with drinking water and protection against natural optical radiation (solar radiation).

30. For the safety and health of workers in workplaces, employers shall ensure:

30.1. unobstructed passages for pedestrians and vehicles so that emergency routes and exits may be reached as quickly as possible, as well as unobstructed emergency routes and exits;

30.2. maintenance of work equipment in adequate technical condition, as well as immediately eliminate defects which negatively affect the safety and health of workers;

30.3. cleanliness in workplaces and regular cleaning of workplaces (in particular ventilation equipment), observing hygiene requirements and without posing threat to the safety and health of workers;

30.4. regular inspection and supervision of the operation of safety equipment and devices, which are intended for the reduction or prevention of the effects of work environment factors;

30.5. the observation of the principles of ergonomics, upon reconstructing, modernising and installing workplaces in order to reduce the physical load of workers as much as possible;

30.6. organising of workplaces (especially with respect to doors, stairs, emergency routes and exits, changing rooms, showers, washbasins, lavatories, rest rooms) so that, if necessary, persons with special needs (handicapped persons) may be employed therein; and

30.7. the opportunity for pregnant women or women following childbirth (up to one year) to lie down and rest in appropriate conditions in accordance with the hygiene requirements. The referred to conditions shall be ensured for women who are breastfeeding throughout the breastfeeding period.

IV. Closing Provisions

31. Cabinet Regulation No. 125 of 19 March 2002, Requirements for Labour Protection in Workplaces (*Latvijas Vēstnesis*, 2002, No. 47) is repealed.

32. In relation to workplaces which have been created up to the date of the coming into force of these Regulations, the requirements referred to in Annexes 1, 2 and 3 to these Regulations shall have a recommendatory nature.

33. These Regulations shall come into force on 1 January 2010.

Informative Reference to European Union Directive

These Regulations contain legal norms arising from Council Directive 89/654/EEC of 30 November 1989 concerning the minimum health and safety requirements for the workplace.

Prime Minister, Minister for Children, Family and Integration Affairs

V. Dombrovskis

Minister for Welfare

Annex 1 Cabinet Regulation No. 359 28 April 2009

Requirements for the Microclimate of Work Premises Depending on Physical Load

No.	Time of the year	Work category	Air temperature (C°)	Relative air humidity (%)	Air movement rate (m/s)
1.	Cold time of the year (average air temperature	\mathbf{I}^1	19,0–25,0	30–70	0,05–0,15
1	outside work premises + 10 °C or lower)	II^2	16,0–23,0	30–70	0,1–0,3
		III ³	13,0–21,0	30–70	0,2–0,4
2.	Warm time of the year (average air temperature	\mathbf{I}^1	20,0–28,0	30–70	0,05–0,15
1	outside work premises exceeding + 10 $^{\circ}$ C)	II^2	16,0–27,0	30–70	0,1–0,4
		III ³	15,0–26,0	30–70	0,2–0,5

Notes.

Category I – the work is not associated with physical efforts or requires very slight or slight physical efforts (for example, all doers of mental work, work with different control panels, work performed while seated, standing or moving, movement of light items (up to 1 kg)).
 Category II – work which is associated with medium or great physical efforts (for example, permanent lifting and movement of weights (up to 10 kg), welding, metal processing works).
 Category III – heavy work (for example, permanent lifting and movement of weights (greater than 10 kg)).

Minister for Welfare

Annex 2 Cabinet Regulation No. 359 28 April 2009

		Em –	
		minimum level	
		of lighting	
No.	Workplace or type of work	above the work	Notes
		area	
		(lx – luxes)	
1.	Movement areas:		
1.1.	traffic routes	100	 Lighting at the floor level. Lighting 150 lx, if vehicles are moving along the traffic routes. Entrances and exits shall be equipped with transition areas in order to prevent sudden changes in lighting between indoor premises and external light.
1.2.	stairs, escalators, travelators	150	
1.3.	loading and unloading ramps	150	
2.	Living and rest rooms, first aid rooms:		
2.1.	canteens	200	
2.2.	rest rooms	100	
2.3.	physical exercise halls	300	
2.4.	changing rooms, lavatories	100	
2.5.	first aid rooms	500	
3.	Management and control rooms:		
3.1.	management and control measuring device rooms	200	
3.2.	switchboards, post rooms, fax rooms, server rooms	500	
4.	Warehouses:		
4.1.	warehouses, including coldstores	100	200 lx, if the rooms are used without interruption
4.2.	sorting and packing areas	300	
5.	Stellage-type storage areas:		
5.1.	passages free of workers	20	Lighting at the floor level.
5.2.	passages with workers present	200	Lighting at the floor level.
5.3.	control points	200	
6.	Stock farming:		
6.1.	loading, work with equipment and managing of devices	200	
6.2.	cattle-sheds and stables	50	
6.3.	veterinary care rooms	200	
6.4.	preparation of feed, milking and dish washing	200	
7.	Cement and concrete industry:		
7.1.	drying	50	Safety colours shall be easily identifiable
7.2.	preparation of materials, work with furnaces and mixers	200	
7.3.	work with equipment, pouring of large moulds	300	

Levels of Indoor Lighting Depending on the Workplace and Type of Work*

		Em –	
		minimum level	
		of lighting	
No.	Workplace or type of work	above the work	Notes
		area	
		(lx – luxes)	
8.	Ceramic and glass industry:		
8.1.	drying	50	Safety colours shall be easily identifiable
8.2.	preparation and work with equipment	300	
8.3.	enamelling, rolling, pressing, formation of	300	
	simple parts, glazing, glassblowing		
8.4.	grinding, engraving, glass polishing, making of precise parts and preparation of glass instruments	750	
8.5.	grinding of optical glass and crystal, manual grinding and engraving	750	
8.6.	precise work, for example, decorative engraving and grinding, painting by hand	1000	
8.7.	preparation of artificial precious stones	1500	
9.	Manufacturing of chemical and plastic		
	products and rubber:		
9.1.	automated device rooms free of workers	50	Safety colours shall be easily identifiable
9.2.	automated device rooms with workers present	100	
9.3.	workplaces where manual work must be permanently performed	300	
9.4.	laboratories and rooms in which precise measurements are performed	500	
9.5.	production of pharmaceutical preparations	500	
9.5. 9.6.	production of pharmaceutear preparations	500	
9.7.	colour testing	1000	
9.8.	cutting, finishing and inspecting	750	
10.	Production of electricity:	150	
10.1.	production of wires and cables	300	
10.1.	windings – spools:	500	
10.2.1.	large	300	
10.2.1.	medium	500	
10.2.3.	small	750	
10.2.5.	spool impregnation and tinning	300	
10.4.	assembly:	200	
10.4.1.	approximate (for example, large transformers)	300	
10.4.2.	medium (for example, control panels)	500	
10.4.3.	fine (for example, telephones)	750	
10.4.4.	very fine (for example, recipiones) equipment, measuring devices)	1000	
10.5.	electronic workshops – inspection and	1500	
1.1	regulation		
11. 11.1.	Production of electricity: fuel supply points	50	Safety colours shall be easily identifiable
11.2.	boiler rooms	100	
11.2.	engine rooms	200	
11.5. 11.4.	auxiliary rooms (for example, pump,	200	
	capacitor, control rooms)		
11.5.	control rooms	500	l

		Em –	
		minimum level	
No.	Workplace or type of work	of lighting	Notes
110.	in omphace of type of work	above the work	10005
		area	
		(lx – luxes)	
12.	Production of food, drink and tobacco		
	products:		
12.1.	workplaces and areas for preparation of raw	200	
	materials:		
12.1.2.	breweries, malt production, barrel filling,	1	
	boiling, sifting, washing and skinning of		
	products		
12.1.3.	canning	1	
12.1.4.	chocolate and sugar production	1	
12.1.5.	tobacco cleaning, drying and preparation,		
12.1.3.	fermentation cellars		
12.2.	initial sorting and product washing, grinding,	300	
12.2.	mixing, packaging	500	
12.2		500	
12.3.	workplaces and critical areas in	500	
	slaughterhouses, in meat product and dairy		
10.4	product shops and filtering rooms	200	
12.4.	sorting and crushing of fruits and vegetables	300	
12.5.	preparation and baking of confectionery and	300	
	culinary products		
12.6.	production, processing, decorating of	500	
	confectionery and culinary products, kitchen		
	work		
12.7.	cigarette and cigar production	500	
12.8.	bottle and dish inspection, product inspection,	500	
	decoration and sorting		
12.9.	laboratories	500	
12.10.	quality control	1000	
13.	Metal industry:	1000	
13.1.	auxiliary tunnels and cellars	50	
	platforms	100	
13.2.	1		
13.3.	sand preparation	200	
13.4.	workplaces by cupolas and mixers, casting	200	
	area, removal from the mould		
13.5.	mechanical preparation	200	
13.6.	manual formation	300	
13.7.	mixers, formation by machine, moulding	200	
	machine		
13.8.	preparation of moulds	500	
14.	Production and processing of metals:		
14.1.	forging in an open mould	200	
14.2.	forging with a press, welding	300	
	work with heavy and medium heavy		
14.3.	machinery (precision tolerance ³ 0,1 mm)	300	
1.4.4		500	
14.4.	precise works with equipment, grinding	500	
	(precision tolerance < 0,1 mm)		
14.5.	designing and inspection	750	
14.6.	work with tubes and wires	300	
14.7.	processing of heavy tinplates (thickness ³ 5	200	
	mm)		
14.8.	processing of light tinplates (thickness ³ 5	300	
	mm)		
14.9.	tool-making	750	
		,	

	1	Em	
		Em – minimum level	
		of lighting	
No.	Workplace or type of work	above the work	Notes
		area	
		(lx - luxes)	
14.10.	customisation, assembly:		
14.10.1.	rough	200	
	medium	300	
14.10.3.	1	500	
	very fine	750	
14.11.	galvanisation	300	
14.12.	preparation and painting of surfaces	750	
14.12.	preparation of tools, moulds and matrices,	1000	
14.13.	thermal processing, processing of micromechanisms	1000	
15.	Rolling and work with metals:		
15.1.	mechanical production site	50	Safety colours shall be easily identifiable
15.2.	production sites where manual activities are	150	
	performed occasionally		
15.3.	production sites where manual activities are performed permanently	200	
15.4.	printing plate warehouses	50	Safety colours shall be easily
			identifiable
15.5.	furnace rooms	200	Safety colours shall be easily identifiable
15.6.	rolling, winding and trimming	300	
15.7.	platforms and control panels	300	
15.8.	testing, measurements and assessments	500	
15.9.	crossings, hatches, cellars	50	Safety colours shall be easily identifiable
16.	Hairdressing and beauty salons	500	
17.	Preparation of articles of jewellery, imitation		
17.	jewellery and similar products:		
17.1.	work with precious stones	1500	
17.2.	Preparation of articles of jewellery and similar		
	products	1000	
17.3.	manufacture of watches by hand	1500	
17.4.	automated manufacture of watches	500	
18.	Laundries and dry-cleaning:		
18.1.	collection, labelling and sorting, washing, dry	300	
	cleaning, ironing and pressing of clothes		
18.2.	assessment and repair	750	
19.	Production of leather and leather goods:		
19.1.	work in warehouses, tanneries	200	
19.2.	scraping, scrubbing, splitting, leathering and trimming of leather	300	
19.3.	manufacture of saddles, manufacture of shoes – cutting, holing, mould forming, sewing, polishing	500	
19.4.	sorting, mechanical leather dyeing	500	
19.5.	quality and colour inspection	1000	
19.6.	manufacture of gloves and shoes	500	
20.	Production of paper and paper products:	200	<u> </u>

No.	Workplace or type of work	Em – minimum level of lighting above the work area (lx – luxes)	Notos
20.1.	wood pulp mill	200	
20.2.	production and processing of paper, production of cardboard	300	
20.3.	binding – folding, sorting, gluing, cutting, engraving and sewing	500	
21.	Polygraphy and ancillary activities related thereto:		
21.1.	cutting, gilding, printing, engraving, electrochemical coating, work with printing moulds, printing machines, template forming	500	
21.2.	paper sorting and manual printing	500	
21.3.	typeface (letter) composition, retouching, lithography	1000	
21.4.	inspection of printing colours for coloured works	1500	
21.5.	copper and steel engravings	2000	
22.	Textile industry:		
22.1.	workplaces and areas by baths, bale opening areas	200	
22.2.	washing, carding, combing, ironing, plucking, drawing, sorting by sizes, styling, pre- spinning, jute and hemp spinning	300	
22.3.	spinning, winding, twisting, wreathing, weaving, knitting, braiding, reeling	500	Prevent stroboscopic effect
22.4.	sewing, knitting by hand, stitching	750	Prevent stroboscopic effect
22.5.	preparation of projects by hand and drawing of dress patterns	750	
22.6.	finishing, painting, automated printing of fabrics	500	
22.7.	drying cabinet	100	
22.8.	macramé, adorning and restoring	1000	
22.9.	colour inspection, production control	1000	
22.10.	very accurate fabric repair work	1500	
22.11.	hat manufacturing	500	
23.	Production of the vehicles:		
23.1.	production and assembly of bodywork	500	
23.2.	painting, painting cabins, buffing cabins	750	
23.3.	colouring – retouching, inspection	1000	
23.4.	production of upholstery	1000	
23.5.	final inspection	1000	

		F _	
		Em – minimum level	
		of lighting	
No.	Workplace or type of work	above the work	Notes
		area	
		(lx – luxes)	
24.	Production of wood and wood products:	Ì	
24.1.	automated device rooms usually free of	50	
	workers		
24.2.	steam treatment	150	
24.3.	band saw (saw-mill)	300	Prevent stroboscopic effect
24.4.	work at workbench, assembly and gluing	300	
24.5.	polishing, varnishing, painting, decorative joinery work	750	
24.6.	mechanised wood processing work – turning, planing, cutting, filing, grooving, milling, sawing	500	Prevent stroboscopic effect
24.7.	selection of finishing materials	750	
24.8.	joinery and inlaying work in wood	750	
24.9.	quality control	1000	
25.	Offices:		
25.1.	document filing, copying	300	
25.2.	reading, writing, typewriting, data processing	500	
25.3.	technical drawing (work at a drafting table)	750	
25.4.	computer-assisted design workplaces	500	
25.5.	meeting, conference rooms	500	Lighting must be adjustable
25.6.	client reception areas, receptions	300	
25.7.	warehouses, archive rooms	200	
26.	Retail trade:		
26.1.	trading areas	300	
26.2.	cashier workstations, wrapping table	500	
27.	Public exhibitions:		
27.1.	entrance halls	100	
27.2.	cloakrooms, rest rooms	200	
27.3.	ticket offices	300	
28.	Hotels, restaurants and catering facilities:		
28.1.	client registration areas	300	
28.2.	kitchens	500	There must be a transition area between the kitchen and the restaurant
28.3.	restaurants, dining rooms	300	Lighting shall be designed in order to create a suitable atmosphere
28.4.	self-service restaurants	200	
28.5.	bars	300	
28.6.	conference rooms	500	Lighting must be adjustable
28.7.	corridors, hallways	100	At night the lighting may be lower
29.	Theatres, concert halls, cinemas:		
29.1.	rehearsal rooms, changing rooms	300	The lighting used on mirrors for the application of cosmetics should be glare-free
30.	Exhibition halls:		
30.1.	general lighting	300	
31.	Museums:		
31.1.	exhibits not affected by light		The level of lighting shall be determined
31.2.	light-sensitive exhibits		in accordance with the exhibition requirements. Protection against optical radiation is especially important

	1	D and	
		Em – minimum level	
		of lighting	
No.	Workplace or type of work	above the work	Notes
		area	
		(lx - luxes)	
32.	Libraries:	,	
32.1.	book storage points, shelves	200	The level of lighting shall be determined
32.2.	workstation of the librarian, reading rooms	500	in accordance with the exhibition
	,		requirements. Protection against optical radiation is especially important
33.	Underground or closed car parks:		
33.1.	entry/exit routes in a car park during the day	300	1. Lighting at floor level.
33.2.	territory of car parks (entry/exit routes in a car	75	2. Safety colours should be easily
	park during the night, traffic zones, parking- lots)		identifiable 3. High vertical lighting increases the recognition of human faces and wherewith the sense of safety
33.3.	passes, pay offices	300	 Avoid reflections in windows. Prevent glare which might come from
			outside
34.	Educational establishments:		
34.1.	kindergartens, children's day centres	300	
34.2.	game rooms, children's rooms, handicraft	300	
51.2.	rooms	500	
34.3.	classrooms	300	Lighting at table surface level. Lighting
			should be adjustable
34.4.	classrooms or evening schooles, adult educational establishment	500	Lighting should be adjustable
34.5.	lecture rooms, auditoriums	500	Lighting should be adjustable
34.6.	blackboard areas, demonstration tables, tables	500	In lecture rooms and auditoriums
	for display materials		lighting should be 750 lx
34.7.	drawing, art rooms	500	
34.8.	drawing and art rooms in art schools, technical drawing rooms	750	
34.9.	practical instruction rooms and laboratories	500	
34.10.	handiwork rooms, technical work rooms,	500	
34.11.	training workshops music instruction rooms	300	
34.11.	computer training rooms	300	
34.12.	language teaching rooms	300	
34.13.	practical work rooms and workshops	500	
34.14.	entrance halls	200	
34.15. 34.16.	corridors, vestibules, hallways		
34.10.	stairs	100 150	
			Lighting at floor loval
34.18.	shared-use facilities of pupils or students and assembly halls	200	Lighting at floor level.
34.19.	teacher and trainer rooms	300	
34.20.	library rooms housing bookshelves	200	
34.21.	library reading rooms	500	
34.22.	teaching material storage sites,	100	
	accommodation		
34.23.	sports halls, gyms, swimming pools	300	Lighting at floor level.
34.24.	school canteens	200	
34.25.	kitchens	500	

	1		
		Em –	
		minimum level	
No.	Workplace or type of work	of lighting	Notes
		above the work	
		area (lx – luxes)	
25		(1x - 10xes)	
35.	Health care institutions:		
35.1.	general rooms:		All lighting at floor level
35.1.1.	waiting rooms	200	
35.1.2.	corridors, hallways (during daytime)	200	
35.1.3.	corridors, hallways (during night-time)	50	
35.1.4.	day rooms	200	
35.2.	rooms for employees:		
35.2.1.	rooms for doctors or nurses	500	
35.2.2.	staff rooms	300	
35.3.	wards, maternity wards:		Avoid excessively intense lighting within the field of vision of patients
35.3.1.	general lighting	100	Lighting at floor level.
35.3.2.	lighting for reading	300	
35.3.3.	simple examinations, examinations and	300	
	investigations		
35.3.4.	examinations, investigations and treatment	1000	
35.3.5.	night lighting, observation lighting	5	
35.3.6.	patient bathrooms and lavatories	200	
35.4.	examination rooms:		
35.4.1.	general lighting	500	
35.4.2.	examinations and treatment	1000	
35.5.	eye examination rooms:	1000	
35.5.1.	general lighting	300	
35.5.2.	external eye examination/checkup	1000	
35.5.3.	reading and colour vision tests with vision	500	
	cards	500	
35.6.	ear examination rooms:		
35.6.1.	general lighting	300	
35.6.2.	ear examination	1000	
35.7.	scanner rooms:		
35.7.1.	general lighting	300	
35.7.2.	scanners with image intensifiers and television systems	50	
35.8.	delivery rooms:		
35.8.1.	general lighting	300	
35.8.2.	examination and treatment	1000	
35.9.	treatment rooms:		
35.9.1.	dialysis room	500	Lighting should be adjustable
35.9.2.	dermatology room	500	· ·
35.9.3.	endoscopy	300	
35.9.4.	trussing	500	
35.9.5.	physiotherapy (including remedial baths,	300	
	massages)		
35.9.6.	radiotherapy rooms	300	
35.10.	operation rooms:		
	pre-operation and post-operation rooms	500	
-	operating theatres	1000	
	lighting angled towards the site of operation	1000	10 000-100 000 lx
55.10.5.	ingiting angled to wards the site of operation		10 000 100 000 1A

		Em-	
		minimum level	
No.	Workplace or type of work	of lighting	Notes
NO.	workplace of type of work	above the work	notes
		area	
		(lx – luxes)	
}	intensive therapy rooms:		
	general lighting	100	Lighting at floor level.
	simple examinations and investigations	300	Lighting at bed level
	examinations, investigations and treatment		Lighting at bed level
	night watch, night duty light	20	
	dental practice rooms:		
	general lighting	500	
	lighting directly above the patient	1000	Lighting should be glare-free for pacient
	lighting angled towards the oral cavity, dental hygiene and dental bleaching	5000	
	laboratories and pharmacies:		
	general lighting	500	
	colour testing	1000	
	sterilisation and disinfection rooms	300	
	autopsy rooms and morgues:		
	general lighting	500	
	autopsy table and dissection table	5000	
	Transportation areas:		
	airports:		
	departure and arrival halls, baggage	200	
	reclamation areas		
36.1.2.	connection areas, transfer areas, escalators,	150	
	conveyer belts		
36.1.3.	information, reception	500	
36.1.4.	customs and passport control	500	Vertical lighting is important
36.1.5.	waiting areas, baggage storage rooms	200	
36.1.6.	security inspection areas	300	
36.1.7.	air traffic control towers	500	1. Lighting should be adjustable
			2. Avoid glare of daylight.
			3. Avoid reflections in windows.
	inspections and refitting, repair hangars	500	
	engine inspection areas		
	measurement areas in hangars	500	
	railway stations:		
	covered platforms, platforms and passenger tunnels	50	
36.2.2.	ticket sale halls	200	
36.2.3.	ticket offices, baggage rooms and counters	300	
36.2.4.	waiting rooms	200	

Note.

* The level of lighting in a workstation may be higher, but the lighting shall not create the risk of accident, including an increased strain of vision and dazzling.

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Annex 3 Cabinet Regulation No. 359 28 April 2009

No.	Workplace or type of work	Em – minimum level of lighting in the work area (lx – luxes)	Notas
1.	Outdoor movement areas in workplaces:		
1.1.	paths intended for pedestrian movement only	5	No workplace
1.2.	traffic areas for slowly moving vehicles (max. 10km/h), for example, bicycles, lorries, excavators	10	
1.3.	permanent traffic of vehicles (max. 40 km/h)	20	
1.4.	pedestrian crossings, turning, loading and unloading points for vehicles	50	
2.	Airports:		 Direct light in the direction of control towers and aeroplane landing should be avoided. Direct light transmitted from projectors above the horizontal line should be reduced to the minimum.
2.1.	hangar areas	20	
2.2.	terminal areas	30	
2.3.	loading areas	50	
2.4.	fuel storage facilities	50	
2.5.	aircraft technical maintenance sites	200	
3.	Building sites:	1	
3.1.	preparation of building sites and trenches	20	
3.2.	construction work areas, mounting of pipelines, consignments, ancillary work and warehouse work	50	
3.3.	assembly of framework, fixtures and wooden elements, installation of electric wires and cables	100	
3.4.	connection of elements, assembly of electric mechanisms and pipelines	200	
4.	Shipping:		
4.1.	ship moorings at canals and sluices	10	
4.2.	pedestrian passageways	10	
4.3.	sluice control and ballast areas	20	
4.4.	transfer, loading and unloading of cargoes	30	Safety signs should be easily identifiable (Em = 50 lx)
4.5.	passenger areas in passenger ports, the hazardous section of pedestrian routes and access roads	50	
4.6.	connection of hoses, pipelines and mooring	50	
5.	Shipbuilding and docks		
5.1.	general lighting of shipbuilding areas, areas for storage of industrial products	20	
5.2.	temporary movement of large units	20	
5.3.	cleaning of the hull of a vessel	50	
5.4.	painting and welding of the hull of a vessel	100	
5.5.	assembly of electromechanical details	200	

Levels of Outdoor Lighting Depending on the Workplace and Type of Work*

No.	Workplace or type of work	Em – minimum level of lighting in the work area (lx – luxes)	Notas
6.	Agriculture (livestock farming):		
6.1.	farmyard	20	
6.2.	open shed for equipment	50	
6.3.	animal sorting pen	50	
7.	Filling stations:		
7.1.	parking spaces	5	
7.2.	entrance and exit access roads in rural regions and city suburbs (dark surroundings)	20	
7.3.	entrance and exit access roads in cities (light surroundings)	50	
7.4.	air pressure, water control points and other service areas	150	
7.5.	control rooms and rooms for control measuring devices	150	
8.	Car parks:		
8.1.	low intensity traffic (for example, car park areas of residential and private houses), bicycle parks	5	
8.2.	medium intensity traffic (for example, by office buildings, undertakings)	10	
8.3.	high intensity traffic (for example, by large trade centres)	20	
9.	Production sites, storage and warehouse territories:		
9.1.	temporary movement of large objects and raw materials, loading and unloading of large-scale cargo	20	
9.2.	continuous movement of large objects and raw materials, loading and unloading of cargo, zone of crane operation	50	
9.3.	work beneath closed platforms	100	
9.4.	inspection of electro-installations, mechanisms and pipelines	200	Use local lighting
10.	Production of refined petroleum products, chemical substances and products and other hazardous sectors:		
10.1.	performance of servicing and maintenance works	20	
10.2.	loading and unloading of dangerous substances and products into/from container transport vehicles and wagons, exchange of pump gaskets, general servicing work, reading of measuring equipment	100	
10.3.	loading and unloading of other chemical substances and products into/from container transport vehicles and wagons, test for leaks, placement and packing of pipelines	50	
10.4.	fuel loading and unloading sites	100	
10.5.	repair of work equipment and electric installations	200	
11.	Electricity, gas and heating production undertakings:		
11.1.	pedestrian movement in electrically safe areas	5	
11.2.	movement of servicing tools, coal	20	
11.3.	supervision	50	
11.4.	general servicing work, servicing and maintenance of wind tunnels, outdoor control measuring device areas	100	Safety colours should be easily identifiable
11.5.	repair of electrical devices	200	Use local lighting

No.	Workplace or type of work	Em – minimum level of lighting in the work area (lx – luxes)	Notes
12.	Processing of timber:		
12.1.	transfer of timber by land and by water, transport of sawdust and chips	20	
12.2.	sorting of timber on land or on water, sites for unloading of timber and sites for loading of sawn timber, mechanical lifting onto a timber conveyer belt, loading in a pile	50	
12.3.	reading of sawn timber labelling	100	
12.4.	sorting and packing	200	
12.5.	feeding to saws and grinding mills	300	
13.	Water management and purification undertakings:		
13.1.	use of servicing and maintenance tools, use of hand- operated valves, starting and stopping of engines, packing of pipelines and raking of plants	50	
13.2.	use of chemical substances and products, test for leaks, change of pumps, general maintenance work, reading of measuring device readings	100	
13.3.	repair of engines and electric devices	200	

Note.

* The level of lighting in a workstation may be higher, but the lighting shall not create the risk of accident, including an increased strain of vision and dazzling.

Minister of Welfare

Permissible Period of Time for Work Outdoors in the Cold and the Temperature Adjustment Table

No.	Actual air temperature* (C°)	Maximum continuous exposure to the cold (min)	Minimum rest period in minutes (min)
1.	from -5 to -10	90	15
u2.	from -10 to -18	80	20
3.	from – 18 to – 30	70	25
4.	Below – 30	60	30

I. Permissible Period of Time for Work Outdoors in the Cold

Note.

* When determining the actual air temperature, the influence of personal protective devices (work clothes and shoes) and wind velocity shall be taken into account.

II. Temperature Adjustment Table Depending on the Wind Velocity

No.	Wind velocity m/sec	Air temperature outdoors (°C)						
		0	- 5	- 10	- 15	- 20	- 25	- 30
		Actual temperature (°C)						
1.	1,8	0	- 5	- 10	- 15	- 20	- 25	- 30
2.	2	- 1	- 6	- 11	- 16	- 21	- 27	- 32
3.	3	- 4	- 10	- 15	- 21	- 27	- 32	- 38
4.	5	- 9	- 15	- 21	- 28	- 34	- 40	- 47
5.	8	- 13	- 20	- 27	- 34	- 41	- 48	- 55
6.	11	- 16	- 23	- 31	- 38	- 46	- 53	- 60
7.	15	- 18	- 26	- 34	- 42	- 49	- 57	- 65

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