

# KAUNAS UNIVERSITY OF TECHNOLOGY

1	1	1	9	5	0	5	8	1
---	---	---	---	---	---	---	---	---

APPROVED BY

Kaunas University of Technology  
Rector's order No. A-349 of June 6, 2011

## INTRODUCTORY INSTRUCTION FOR FIRE SAFETY

### I. GENERAL PROVISIONS

1. This instruction establishes basic fire safety requirements, necessary during exploitation of the university's buildings; it is mandatory for the persons, constantly working at the university and other staff, as well as to the persons, who are sent here on a business trip or temporarily working for the university.
2. Besides this instruction, it is mandatory to comply with requirements of the existing standard, building technical regulations and rules, technological provisions, rules for installation and exploitation of electrical devices, other normative acts regulating fire safety.
3. A person responsible for fire safety is appointed for insurance of fire safety at the university. Head of Department is responsible for fire safety at each university's department.
4. All university's employees must comply with requirements of fire safety rules, in case of fire save people, protect tangibles and extinguish fire.
5. Employees, who violate requirements of this instruction, are liable under procedure established by legislation of the Republic of Lithuania.

### II. TERRITORY, BUILDINGS AND PREMISES

6. Access roads and access to the buildings, emergency exit ladder, fire inventory, fire hydrants and water reservoirs must be unobstructed. Spaces between buildings must be open and unobstructed.
7. Automatic gates for entrance to the territory, barriers and other devices must have a manual operation, allowing opening them at any time.
8. Litter and other combustible waste must be constantly removed from buildings and territory. Waste must be collected to special containers and taken away or removed to the specified place.
9. Locations for car parking and storage of materials must be marked in the university's territory.
10. It is prohibited to pour explosive and inflammable products, contaminated industrial waste water to sewerage and water reservoirs.
11. It is allowed to have bonfires not closer than 30 m from the buildings. It is prohibited to leave burning fireplaces unattended. It is necessary to extinguish smouldering fireplace.
12. It is allowed to use roasters, fireplaces, household ovens, smokehouses, outdoor fireplaces not closer than 6 m from the buildings.
13. **Smoking (use of tobacco products is prohibited at the university.** (Part one, clause one of Article 19 of the Law on Tobacco Control of the Republic of Lithuania)

14. Smoking is allowed at specifically designed places marked by special marks and properly installed, which provide a fireproof vessel for cigarette ends (smoking is prohibited at the university and its territory according to legal acts).

15. Means of transportation are parked in the parking lots leaving at least 0,6 m distance between the cars.

16. In case of fire it is prohibited to use lifts for evacuation of people.

17. Cover of the floor of evacuation routes must be fixed.

18. It is prohibited to keep gas cylinders, extremely inflammable materials and preparations, explosive and other hazardous substances, which explode and burn when exposed to water, oxygen or interacting amongst them and emit toxic products during burning in the basements and on the ground floors.

19. It is prohibited to keep any materials, to install warehouses and production premises in the attics. Attics must be locked and keys kept in accessible place, where they can be taken from at any time.

20. Ladder for access to the roof from the building staircase must be orderly and fixed, roof hatches, doors and windows can be opened at any time.

21. Fire safety instructions must be on the wall at the premises of A<sub>sg</sub> and B<sub>sg</sub> categories of explosion and fire risk.

22. Litter must be cleaned from the pits of basement windows. It is prohibited to install irremovable grating on them.

23. It is prohibited to keep inflammable materials and preparations under the stairs and in technical niches.

24. It is prohibited to use open fire in basements, attics and premises of A<sub>sg</sub>, B<sub>sg</sub> categories of explosion and fire risk.

25. It is prohibited to warm up various communication pipelines in the buildings and premises using open fire.

26. When cables and pipelines cross building constructions, openings between them and constructions must be isolated throughout all thickness of construction, using filler, which fire resistance is at least equal to the fire resistance of the building construction which is crossed.

27. Electricity grids and equipment must be installed, exploited and repaired according to the requirements of legal acts. They must be suitable for exploitation, safe in regards to explosion and fire.

28. In case failures of electricity grids and equipment, which cause sparking, heating of cables, wires and engines, are observed, they must be turned off immediately and failures must be eliminated.

29. Places of access to electric panels and distribution panels must be orderly and unobstructed. It is prohibited to keep any material in them and within 1 m distance from them.

30. It is allowed to use a temporary electrical installation only during construction, repair works or liquidation of emergencies.

31. Only flexible cables must be used for portable electrical lamps and other portable electrical equipment.

32. Distance between electrical lamps and inflammable materials must be at least 0,5 m.

33. Electrical lamps must be equipped with electrical bulbs, which power does not exceed the one specified in the lamps' technical characteristics.

34. While exploiting electrical equipment, it is prohibited to:

34.1. heat premises using non-standard (home-made) electrical equipment;

34.2. use disorderly socket outlets, sockets, distribution boxes, switches and other electrical devices;

34.3. cover electrical lamps, light lenses and heaters with inflammable materials;

34.4. plug electrical equipment, which exceeds permissible power, into socket outlets;

34.5. use irons, stoves, kettles, heaters and other electrical equipment in unsuitable places and leave them plugged in unattended, except automatically operated electrical equipment;

34.6. hang electrical lamps and other things directly on electrical wires and cables;

34.7. use uncalibrated and home-made protection devices;



- 34.8. use electrical lamps with removed protective covers) and unsealed lighting fitting in the premises of Apg, Bpg and Cg categories of explosion and fire risk;
- 34.9. use wires and cables with isolation material, which is damaged or lost its dielectric characteristics during exploitation;
- 34.10. directly nail down wires and cables.
35. Wires and cables must be connected by pressing, welding, soldering or using special connections.
36. Wires of different metals can be connected only using special connections.
37. Wires and cables of open electrical installation at the places, where they can be damaged mechanically, must be additionally protected (by armour, steel pipes, angle, channels, etc.). Places of crossing of unprotected insulated wires and building constructions that are not subject to flammability requirements must be additionally protected against inflammation.
38. Unused open electrical installation must be dismantled.
39. Electrical equipment, which is not in service, must be disconnected from electricity grid.
40. All heating devices must be installed and exploited under fire safety requirements, specified in the producer's instructions and other legal acts and must be inspected prior to the heating season.
41. Ventilation devices must be installed and exploited under fire safety requirements, specified in producer's instructions and other legal acts.
42. Taking into consideration producer's requirements, but at least once per year, it is mandatory to inspect technical condition of ventilators, ducts, fire compartmentalization devices, humidification chambers and grounding devices.
43. It is prohibited to keep devices and any materials in ventilation chambers. They must be locked.
44. It is necessary to constantly control technical condition of exploited automatic fire compartmentalization devices and regularly clean sediments from sensitive control elements.
45. In case there are any failures that can directly or indirectly cause fire, it is necessary to turn off ventilator and eliminate the failures immediately.
46. While exploiting ventilation and air conditioning systems, it is prohibited to dismantle fire compartmentalization devices or their separate elements.

### III. FIRE WORKS

47. Fire works include production operations, which involve use of open fire, possible formation of sparks or materials are heated to the temperature, which can cause their ignition (welding of metals using electricity and gas, works with blowtorches, etc.).
48. A person, responsible for fire safety at the university, issues permits for performance of fire works. Welders, supervised by Head of Department or highly qualified welders (list of such welders is made by Occupational Safety Group) and approved by Director of Department of Facilities Management can perform fire works without permits.
49. If constructions or materials, which can ignite, are within 5 m radius during fire works, they must be removed or properly protected by metal covers, moistened with water. Also, measures must be taken to ensure that sparks do not fall on the inflammable constructions, yards and floors, which are below.
50. A person, responsible for safety of fire works, must inspect a temporary place of fire works at least 4 hours after fire works are finished.
51. Performance of fire works in the buildings for education is allowed only when people are absent.

### IV. WORK IN LABORATORIES



52. Personnel of laboratories must be acquainted with explosiveness, combustibility of the chemicals that are used and comply with relevant safety requirements.

53. All laboratory works, which can result in emission of harmful, explosive and/or inflammable gasses and steam, must be performed in fume hoods, which are in technically good order with operative ventilation system.

54. Alkaline metals must be kept in waterless kerosene or oils, in tightly closed (air-tight) thick-walled vessels. Jars with alkaline metals must be put to tightly closed metal boxes.

55. Cylinders of pressurized, liquefied and dissolved gas must be kept in metal closets, outside of laboratory. Closets must have openings or ventilation devices.

56. Next to the places where chemicals are kept must be displayed clear notes, indicating characteristics of the chemical, for example, "Dangerous fire", "Toxic", etc.

57. Ventilation system in all laboratory premises must be turned on 5 min before the work and turned off when the work is finished.

58. It is prohibited to leave equipment and other electrical devices plugged into electricity grid unattended.

59. It is prohibited to pour extremely flammable, very flammable and flammable liquids and preparations to the sewage. Used liquids must be poured to a hermetic container and taken out from the laboratory at the end of working day.

60. Fire extinguishing and neutralizing measures must be present in test equipment premises according to the characteristics of the used materials and features of technological processes.

## V. GAS

61. Gas networks and other devices of gas management must be installed, exploited and repaired under fire safety requirements established in the legal acts.

62. Gas cylinders kept in the warehouses cannot be exposed to heat and precipitation. Keeping of gas cylinders in the warehouses of other purposes is prohibited.

63. There must be at least 1 m distance between gas cylinders and heating devices.

64. It is prohibited to put gas cylinders next to the doors of evacuation routes, at the facade side of the buildings and next to the entrances.

65. It is prohibited to leave actuated gas devices unattended.

66. In case a smell of gas is felt in the premises, it is necessary to turn off gas pipeline tap immediately, ventilate all premises and call emergency gas service. Until failure is eliminated, it is prohibited to burn matches, smoke, use open fire, turn electrical devices on and off in the premises.

67. It is prohibited to use open fire while determining the place of gas leak.

## VI. EVENTS OF MASS GATHERINGS

68. This chapter provides fire safety requirements for the events, which involve a gathering of 100 or more people.

69. During cultural events, there must be persons on-duty, who provide instructions of fire safety requirements and procedure of evacuation of people in case of fire. Duty personnel must supervise compliance with fire safety requirements during the event.

70. Chairs in the premises of cultural events must be joined to the rows or fixed to the floor. Passages and exits must be located so that flows of people would not cross.

71. In the premises of mass events it is prohibited to:

71.1. narrow paths between rows of chairs and put additional chairs, armchairs and benches;

71.2. lock the doors and close the shutters;

71.3. use inflammable decorations, stage curtains, dress the scene using extremely inflammable and very inflammable materials;

71.4. keep decorations and inventory under the scene or platform;

71.5. install mirrors and door imitation on evacuation routes;

71.6. allow a bigger number of people in the premises than specified in the technological part of the project;

71.7. use hazardous chemicals for lighting of scene and other effects.

72. During Christmas and New Year's Eve celebrations Christmas tree must stand on a solid foundation (rack or barrel with sand), far from the door and not obstruct exit from the premises. Distance between tree branches, ceiling and walls must be one meter.

73. Tree illumination must be installed under requirements of the applicable legal acts. Garland lamps must not exceed 25 W power, wires - copper and flexible.

74. In case at least a small failure of the tree lighting is noticed (heated wires, often fusing lamps, sparks, etc.), lighting must be turned off.

75. It is prohibited to decorate the tree using inflammable materials, candles and Bengal fires.

76. Location for placement of tents, huts and other buildings for recreational and other mass events and religious ceremonies must be approved by institution subordinate to Fire Safety and Rescue Department.

## **VII. CLOSING OF PREMISES**

77. At the end of working day, before closing of premises, Head of each Department or a person, assigned for closing of premises must inspect, if:

77.1. there is no gas smell and other uncharacteristic specific smells in the premises;

77.2. electrical devices, radio, ventilation systems, lighting, etc. are turned off;

77.3. alarm systems are activated;

77.4. there are no highly flammable and inflammable liquids left at the working place;

77.5. there are no things (rags, inflammable materials, etc.) on the heating devices;

77.6. windows, doors, etc. are closed;

77.7. people are absent from the premises and emergency lighting is working;

78. If Head of Department or a person, assigned for closing of premises notices any violations, he/she must take measures for their elimination.

## **VIII. ACTIONS IN CASE OF FIRE**

**79. Each employee, who notices fire, must:**

**79.1. immediately inform firefighters about the fire by emergency number 112 or 01, OMNITEL 101, BITĖ and TELE-2 011;**

**79.2. notify managers, other employees, students;**

**79.3. extinguish fire using the available measures.**

80. When managing employee comes to the place of fire, he/she must:

80.1. inspect if firefighters have been called;

80.2. lead extinguishing of fire until the arrival of fire fighters;

80.3. assign a person, who knows access roads and water reservoirs well, to meet firefighters;

80.4. evacuate employees and students, who do not extinguish fire, from the building and dangerous zone;

80.5. if needed, turn off electricity, gas, devices and use the available measures for prevention of spreading of fire;

80.6. organize removal (taking to the safe place) of inventory and equipment from the fire zone;

80.7. provide necessary information about the object to the firefighters, who arrive.

Instruction prepared by:

Arūnas Pūras, Senior Engineer of  
Occupational Safety Group