

1. General information

Work with open fire - it is understood as all work related to the use of a flame resulting from the combustion of technical gas and includes:

- a) related to the use of **propane-butane** gas cylinders:
 - a. filling the cracks in the asphalt with liquid tar (heated and melted),
 - b. roofing works related to heating and burning tar paper,
 - c. heating, thawing frozen or wet surfaces,
- b) cutting steel or other metals with an **acetylene torch** – **Standard 4.1 Welding work** applies to **this type of work**.

2. General rules for the performance of works

1. In many cases, open fire work is related or performed in the course of other works (e.g. work at heights, on roofs and ceiling edges) which entails the obligation to comply with the standards that define the relevant requirements for this work.
2. Personal protective equipment that employees should have - in addition to the standard ones, should also focus on respiratory protection and eyesight (glasses, protective face shield), and if necessary - to protect other areas of the human body.
3. In the case of performing any fire-hazardous work at the work contractor's workplace, there should be mandatory extinguishing agents:
 - a. dry powder extinguisher with the mass of the extinguishing agent at least 4 kg designed to extinguish fires of ABC groups (number adequate to the positions),
 - b. a fire blanket.
4. The firefighting equipment should be fully operational, and each time before starting work, should be checked for possible damage and validity of the extinguishing agent and its quantity; damaged or empty fire extinguishers must be replaced for a brandly new.
5. Performing any fire-hazardous work without having the efficient ones and complete handheld extinguishing agents and adequate PPE is not acceptable.
6. It is strictly forbidden to perform works with open fire in indoor areas (production, office, etc.) and in areas where there is a suspicion of an explosive atmosphere. Performing work in areas where an explosive atmosphere may appear should be agreed with the Plant Fire Department and the LG Health and Safety Department.
7. In situations in which, due to technological solutions, it is not possible to use alternative methods of work - it is allowed to perform activities related to the use of open fire - only on the basis of the Instructions for Safe Performance of Works (IBWR), previously developed and approved by the LG Health and Safety Department.
8. Works of this type involve a particular risk of fire, and therefore it is required to ensure constant supervision over employees while they perform their work.

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- a) face shield
- b) protective helmet,
- c) suitable footwear and work clothes,
- d) non-flammable warning vest (remove flammable),
- e) protection of the respiratory tract and eyes / face,
- f) protective gloves,
- g) depending on the type of work other adequate PPE.



Handheld extinguishing agents that the contractor should possess should be in proper technical condition. It is forbidden to use the plant equipment for purposes other than its intended purpose - for the needs of external companies.

Conducting any fire-hazardous work requires informing the Plant Fire Department about this fact and follow their recommendations. Performing this type of work without the appropriate permit is not allowed.

All employees involved in the performance of works should be familiarized with the Instructions for Safe Performance of Works - which they confirm with their own signature.

Standard 4.2 Work with open fire

9. The area where fire-hazardous works are carried out should be properly fenced off before they start, if necessary - an observer (watchman) should be designated who will be responsible for preventing third parties from entering the area.
10. Requirements for a propane-butane gas cylinder and a gas jet:
 - a. the cylinder should be equipped with a functional gas valve with operational ones gaskets (1), and an anti-return gas reducer (2),
 - b. the torch supply hose should be compliant with ISO 16436-1 or ISO 3821, undamaged, designed for this type of work, equipped with appropriate couplings, the gas torch should have an efficient flow regulator (3).



11. Before starting work, check the cleanliness of the valve on the gas cylinder and purge the cylinder valve, then check the condition of the seals.
12. The reducer, which reduces the pressure of gas taken from the cylinder, is screwed to the cylinder valve, tightened with an appropriate wrench, the hose should be connected to the torch handle and with the reducer with quick couplings.
13. Then close the shut-off valve located on the handle of the torch and open the valve on the cylinder - if you smell gas - replace the torch (it is leaky or its components are damaged). However, if you do not smell the gas, open the valve on the torch handle, ignite the escaping gas with a lighter or other source of fire, then you can adjust the size of the flame using the valve on the torch.
14. The torch should be operated by employees trained in the correct way and safe operation. While working, do not direct the flame towards people, at the hose or at the gas cylinder.
15. After finishing work, close the cylinder valve, and when the flame goes out - the valve on the torch handle. Then disconnect the hose from the cylinder and put the torch aside to a safe place (to cool down). The contractor stores the gas cylinder within its scope, it is forbidden to leave gas cylinders in the areas of the LG plant.
16. In case of situations related to the ignition of the heated material or other object or the employee's clothing, effective extinguishing action should be taken as soon as possible with the use of portable extinguishing agents. It is obligatory to notify the Plant Fire Department, Company Emergency Service (if necessary) and the Health and Safety Department of LG about the fact.
17. The place of fire should not be left unattended until the arrival of appropriate services. It is then not possible to continue work.

Remember!

Roofing work related Long-term firing of roofing felt or similar materials is associated with the emission of vapors harmful to health as a result of gas combustion and partial melting of the heated material. To reduce the risk of inhalation of harmful vapors, workers should wear appropriate PPE and work with a burner, preferably against the wind.

Gas cylinders used for this type of work should come from known and legal sources of distribution. Burners and their accessories should have appropriate approvals. It is forbidden to use damaged or leaking cylinders and the burner and its components, as well as to repair them yourself.

When working with a gas burner, handheld extinguishing agents should be at least 2m away from the work site. It is forbidden to direct the flame of the gas burner at them.

Damaged cylinders, valves, regulators and parts of the gas burner should be properly marked and, if possible, disposed of so that they are not allowed to be reused by other employees.

Propane-butane as a gas is heavier than air and is kept in the lower parts of the rooms and depressions of the areas, which may make it imperceptible to humans, but it is still present in the environment.