

INNOVATIVE APPROACH TO THE DEVELOPMENT OF ELECTRICAL INSTALLATION EQUIPMENT

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Abstract: Any object of the modern world needs electricity, which means that it needs reliable and modern electrical work. Construction and installation works are carried out during the construction of new facilities, during the reconstruction or replacement of existing electrical equipment and electrical networks.

Keyword: Electrical, The developed innovative GEO-1-1/3/1.

ИННОВАЦИОННЫЙ ПОДХОД К РАЗРАБОТКЕ ЭЛЕКТРОМОНТАЖНОГО ОБОРУДОВАНИЯ

Аннотация: Любой объект современного мира нуждается в электричестве, а значит, нуждается в надежных и современных электромонтажных работах. Строительно-монтажные работы выполняются при строительстве новых объектов, при реконструкции или замене существующего электрооборудования и электрических сетей.

Ключевое слово: Электротехника, Разработанный инновационный ГЭО-1-1/3/1.

INTRODUCTION

Electrification of both residential and industrial buildings and structures is one of the most important stages of their commissioning. The possibility of functioning of the vital systems of the building depends on the quality of the electrical installation work.

To ensure the possibility of changing the wiring, the passage of cables and wires in a protective sheath is carried out in pipes or boxes; the fire resistance of the passage must be no less than the fire resistance of the building structure in which it is made. Gaps between wires, cables and a pipe or duct should be sealed with an easily removable mass of non-combustible material. It is allowed to lay cables and wires in a protective sheath through building structures in specially made holes [1].

MATERIALS AND METHODS

Also, the use of innovative modern electrical equipment makes it possible to effectively use the area intended for electrical installation.

When laying wiring and calculating power consumption, it is necessary to take into account the needs of both buildings as a whole and individual rooms. It is necessary to provide convenient connection and aesthetic appearance of electrical equipment. Priority attention should be paid to the safety of operation of electrical networks and equipment [2].

At this time, it is relevant to make electrical installation as compact and safe as possible. To achieve the goal, we need to choose such equipment that it is generally accessible and compact.

This article discusses the issue and the effective and economical aspects of the use of electrical equipment and the area allocated for electrical installation.

During the construction of the building, the owners perform electrical installation in an apartment or cottage in various ways:

1. Entrust the development of the power supply project with its full implementation to the registered installation organization;
2. Seek help from practicing electricians, hiring them to perform certain types of work;
3. They themselves do the wiring in the apartment and house based on their own experience.

The first method seems to be the most expensive, besides, it requires a certain amount of money to carry out quick settlements with the installation organization.

Paying electrician practitioners allows you to save a little cash when installing electrical equipment.

RESULTS AND DISCUSSION

The third method is used, as a rule, by people with a limited budget or specialists who are confident in their abilities.

All three methods have the right to exist, but for a conscious choice of any of them, it is important to know in detail the advantages and most characteristic disadvantages of each method in order to clearly analyze: what is included in the cost and comfort of electrical work for each specific case [2].

Electrical installation requires different types of electrical equipment. For example, sockets, switches and others. Electrical cables are used for the electrical installation of individual sockets and switches. It is possible to reduce the used installation cables and save the cost of cables. In order to reduce costs in the electrical installation of apartments, offices and residential buildings, innovative electrical equipment, the so-called “hybrid electrical equipment” offered by us (GEO-1-1/3/1), makes it possible to achieve modern, economical and safe electrical installation.

The developed innovative GEO-1-1/3/1 consists of three sockets and one switch. To ensure compactness, they are connected to one frame. Insulated on all sides for safety and knocking down electric current.

In electrical work, to provide electrical current to innovative equipment, fewer wires are required than conventional electrical installation. Electrical installations of multiple outlets and a switch require more electrical cables than innovative hybrid electrical installations. When installing separate sockets and switches, it is paid per piece, in such situations it is spent much higher than the innovative electrical equipment developed by us.

CONCLUSIONS

The advantage of GEO-1-1/3/1 is a simple way to use without any manuals. You can merge with color according to the design of the room. Expensive materials are not used in the component part of the equipment and its internal elements can be easily replaced. And one more of the advantages of GEO-1-1/3/1 is its replacement with the place allocated for electrical installation.

When used, compactness, efficiency and safety in the use of equipment are ensured.

No.	Equipment parameters	Measurement value	unit of measurement
1	Working voltage	0~230	Volt
2	Permissible current	0~10	Ampere
3	Economic profit (for a room with a size of 3m * 3m)	6	U.S. dollar

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