

### **International Journal of Innovative Analyses and Emerging Technology**

| e-ISSN: 2792-4025 | http://openaccessjournals.eu | Volume: 1 Issue: 7

### The Principles of Formation of a GYM in Modern Multi-Storey Residential Buildings

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**Abstract:** The article discusses the creation of a GYM or sports corners in multi-storey residential buildings, and the selection of the optimal solution for the placement of sports equipment. The article provides information on the requirements for the formation of special exercise rooms in the house. In the design of sports rooms in the apartments are shown aspects that should take into account the lifestyle and mentality of the population of the Republic of Uzbekistan.

**Keywords:** Residential buildings, fitness room, exercise rooms, mini gym, exercise equipment, yoga room, gym, ponaramic view, exercise bike, bright accents, treadmill, floor mat, wall paper, home gym decor.

#### INTRODUCTION

Having a personal gym is the dream of every supporter of a healthy lifestyle. It is also possible to equip a comfortable corner to create the perfect physical activity environment at home. The carefully thought-out design of the gym allows you to decorate the room not only beautifully, but also ergonomically and safely. Organizing a gym at home is also considered as a solution to some problems:

Firstly, special gyms, gyms or fitness clubs require special funds.

Secondly, people do not have time to go to the gym, except for their work, study and other personal activities, or they leave work too late.

Thirdly, in the Uzbek mentality, many women do not allow their husbands to attend public fitness clubs once they are married. From a physiological point of view, sport is considered an important factor in women's health[3]. In such cases, the most convenient solution is to create a special room for sports at home.

#### MATERIALS AND METHODS

For full-fledged sports, comfortable location of exercise equipment and convenient storage of sports equipment, a fairly extensive area is needed. The minimum size of the room for gymnastic exercises should be at least 8 square meters. The ideal option for placing a private gym is a separate room with an area of more than 10 square meters with good ventilation and large windows. Sufficient air supply is the key to well-being during cardio training[5]. A high level of natural light is necessary to improve performance, improve mood and prevent the occurrence of traumatic situations. The most appropriate rooms in the house are the attic and the glazed veranda. Attic ceilings are very often equipped with beams, on which it is convenient to hang shells, for example, a punching bag. There are also windows in the attic that will serve as a source of light and air exchange.

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Home gym in the loggia.

When equipping the attic as a gym, it is necessary to take care of the air conditioner. Due to the heating of the roof, this part of the house is usually characterized by an elevated air temperature. The veranda of a private house is also perfect for training. An abundance of light, a constant supply of air and a wonderful panoramic view of the garden and the house territory will make sports comfortable and productive. For a home sports complex, you can also use a basement or ground floor. But when planning these rooms, it is worth paying special attention to lighting and ventilation system.

### Basic rules of home sports club design development.

Any design solution can be implemented when designing a room for a gym. But when planning a room, it is important to comply with the basic requirements that are put forward not only for a home, but also for a public or school sports complex:

- ✓ The location of equipment and shells should be as thoughtful as possible. This is important not only for the comfort of the trainees, but also for their safety;
- ✓ Use the available space efficiently and place equipment and exercise equipment using all possible space. But do not forget about the minimum allowable distance between the equipment. This is especially important in cases where several family members will be engaged in the home sports club at the same time:
- ✓ The interior of the room should not only be attractive. The developed design and the finishing selected for it should contribute to maintaining cleanliness and convenient maintenance of shells. The most acceptable style for the arrangement of the gym is the loft[7].

In this current, wooden beams are welcome, convenient for attaching sports equipment, and an abundance of functional metal structures that can also be used for training equipment.

### The Gym zoning.

As in a public complex, in a gym at home it is customary to divide the room into certain functional zones. Not all of them are mandatory for implementation in the cottage, but their presence will make your stay in an individual sports club as comfortable as possible:

- ✓ It is necessary to provide a corner where you can change clothes or leave your personal belongings: napkins, mobile phone or towels. Hang a hanger here, put a small bench and a table. It is desirable that there is at least one outlet that allows you to recharge your gadgets while you train;
- ✓ If you plan to do fitness at the same time with other family members, it is worth allocating a place for group workouts in the home gym. In this area, it is also appropriate to place a large mirror that will allow you to see yourself from the outside and monitor the correctness of the exercises;
- ✓ The warm-up area can also be supplemented with a mirror. Here you will start your workouts, preparing your muscles for loads, and finish individual classes. There may also be a special mat on which you can swing the press lying down or do stretching;
- ✓ The exercise area in a home gym can simultaneously contain both equipment for working on specific muscle groups and cardio equipment. This area can be combined with the area of power equipment and free weights to save space;
- ✓ Also, in the home gym, it is worth allocating a place for SPA treatments. There may be a massage chair, as well as cosmetics for modeling the figure, fat-burning creams that increase the effectiveness of exercises[4];

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Do not forget about the kids, having prepared a children's corner for them. It should be located in a place that is visible from anywhere in the room. This will allow you to control the child even during sports.

### Color scheme for interior decoration of the gym.

Among psychologists and doctors, the most suitable colors for the gym are delicate pastel shades of blue and green, noble gray and soft cream tone. These colors allow you to create a neutral and calm atmosphere, allowing you to concentrate on training. Psychologists say that warm shades, for example, peach or beige, are the most motivating for women. Men are inspired by the cold tones of gray and blue[3]. Bright and juicy shades can also be used in the decoration of the decoration for the sports complex. They will have a stimulating effect. But from the abundance of screaming tones, you can get tired too quickly. Therefore, it is better to use them in halls focused on short but intensive classes. Black and steel shades perfectly fit into the high-tech style and look organic if they are used in a room dedicated to a gym.

**Floor covering**. The main requirements for the floor covering in the gym are determined by the purpose of the room. These include:

- anti-slip and safety;
- > sound insulation;
- impact resistance;
- > ease of cleaning.

Wooden floors are absolutely not suitable for a future gym. They will not be able to provide the necessary noise absorption and will forever lose their aesthetic appearance if a heavy projectile is accidentally dropped on them.

**Design project of a home gym**. The optimal type of floor for a home-based sports complex is a screed. It is best to use a floating one, since it has higher sound insulation properties. It is worth laying a thick-layer carpet or cork floor on it. These types of coatings are quite soft and have low sound conductivity. If you plan to train with a lot of weight, you should additionally cover the floors under the equipment with special rubber mats that will protect the surface from impacts.

**Wall decoration**. The vapor permeability of the walls is the key to a healthy atmosphere in the gym. During intense physical exertion, the human body releases a sufficiently large amount of moisture, which should be freely removed from the room. If several athletes train in the room at once, the release of liquid can become critical and, with incorrectly selected materials, it can provoke the appearance of condensation on the walls. Therefore, plastic or ceramic tiles are not used to finish the walls of the sports complex, as they make the surface practically airtight and unable to absorb excess moisture from the air. The optimal materials are paper wallpaper, natural cork panels, modern "breathable" plaster[7]. But no high-tech finishing will save the room from high humidity if the exhaust system works poorly. Therefore, carefully consider the ventilation project before the start of finishing work. You can decorate the walls of the room with motivating inscriptions. Such decor will fit perfectly into the loft style. Like the walls, the ceiling surface should let steam through well. For finishing this area on the attic floor, a tree is ideal, which not only has high vapor permeability, but also fits perfectly into the country interior of a country house. Fans of more modern and restrained styles will like stretch ceilings. They favorably differ in quick installation, are easy to maintain, it is easy to hide wiring for overhead lighting and a powerful exhaust system behind their canvas, which is necessary to maintain a suitable microclimate in the gym. But you should stop your choice not on the usual French PVC-based ceilings, but on the so-called "breathable" fabric-based finishing materials. Suspended ceilings with

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the use of drywall, the vapor permeability coefficient of which is about 0.075 mg / (m \* h \* Pa), can become a more budget option for finishing[5].

**Lighting**. When planning the location of lighting fixtures in the home gym, avoid using colored lamps. They will overload the eyes during training and will not allow you to focus on exercises. It is better to use lamps that produce an intense beam of white light. The light must be overhead and well illuminate the place where the trainee makes approaches. Special attention should be paid to the areas near the mirrors: here the illumination level should be as high as possible. You can add additional ceiling lights that can fully illuminate the athlete[3]. If there is a large window in the room through which a large stream of natural light passes, plan the placement of simulators and projectiles so that the window openings are on the side of them.

**Gym equipment**. The equipment of the home fitness complex depends on the preferences of the household and the sports they are engaged in. To maintain physical fitness, a basic set of shells and equipment is needed, which can be rationally placed even in a small room. It consists of:

- > swedish wall;
- suspended horizontal bar, preferably with rings;
- > dumbbells:
- > kettlebells;
- skipping rope;
- $\triangleright$  the hoop[6].

Installation of the prefabricated wall can be carried out with your own hands, without resorting to the services of specialists. If the room area allows, you can supplement this set with basic cardio equipment: a treadmill, an exercise bike or an elliptical trainer of the orbitrek type. And fans of strength training can not do without a barbell and equipment for working with specific muscle groups. There are also a number of highly specialized shells and equipment that people who are engaged in a particular sport will need. For example, fighters will need a punching bag, and for those who cannot imagine their life without dancing, it is difficult to conduct a lesson without a choreographic handrail or pylon. To enjoy your own gym, you will have to sacrifice one of the rooms, which is often an unacceptable luxury for the inhabitants of a small apartment. But even in conditions of limited space, you can arrange a comfortable place for training. It is better to allocate a zone for gymnastic exercises near the window in order to provide the body with the necessary fresh air. Give preference to folding simulators. With regular training, they are no less effective than their bulky stationary counterparts, and take up very little space when assembled. For shells, it is worth allocating a separate locker on which you can hang motivating slogans or a description of exercises for the current workout. Kettlebells, dumbbells and a barbell can be hidden under the bed or behind the sofa after classes[4]. Such an arrangement of inventory will not interfere with the rest of the household.

### **CONCLUSION**

Sport is the way not only to a beautiful body and health, but also to spiritual harmony. A home gym can become a real school, educating discipline, perseverance, iron character and endurance. A stylish interior will help turn the room into a real pride of the owners of the house and confirm their respectability.

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ISSN 2792-4025 (online), Published under Volume: 1 Issue: 7 in December-2021
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