

**KONDITIONERLI XONALARNING MIKROIQLIM XUSUSIYATLARINI  
HISOBGA OLGAN HOLDA QULAY OFIS KIIYIMINI LOYIHALASH**

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*Аннотация: Mazkur ilmiy ishda konditsioner tizimlari bilan jihozlangan ish xonalarida shakllanadigan mikroiqlim sharoitlari o'rganiladi va ushbu omillar asosida ofis kiyimini ergonomik va funksional jihatdan qulay tarzda loyihalash masalalari ko'rib chiqiladi. Ofis xodimlarining faoliyat turi, yosh xususiyatlari, kiyimga qo'yiladigan estetik va gigiyenik talablar, shuningdek, mato materiallarining issiqlik-fizik va havo o'tkazuvchanlik xususiyatlari e'tiborga olinadi. Kiyim dizaynerlari, mehnat muhofazasi mutaxassislari hamda yengil sanoat korxonalari uchun foydali bo'lib, ofis muhitida salomatlik va ish unumdorligini ta'minlovchi kiyimlar yaratishga xizmat qiladi.*

*Калит so'zlar: ergonomik, materiallar, loyihalash, xususiyatlar, metodologiya, texnologiya, gigienik qulaylik, izolyatsiya.*

**ПРОЕКТИРОВАНИЕ УДОБНОЙ ОФИСНОЙ ОДЕЖДЫ С УЧЕТОМ  
МИКРОКЛИМАТИЧЕСКИХ ОСОБЕННОСТЕЙ ПОМЕЩЕНИЙ С  
КОНДИЦИОНЕРАМИ**

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*Аннотация: В данной научной работе будут изучены микроклиматические условия, формирующиеся в рабочих помещениях, оборудованных системами кондиционирования воздуха, и на основе этих факторов будут рассмотрены вопросы эргономичного и функционально комфортного проектирования офисной одежды. Учитываются вид деятельности офисного персонала, возрастные особенности, эстетические и гигиенические требования к одежде, а также теплофизические и воздухопроницаемые свойства тканевых материалов. Он полезен для дизайнеров одежды, специалистов по охране труда и предприятий легкой промышленности и служит для создания одежды, обеспечивающей здоровье и производительность в офисной среде.*

**Ключевые слова:** *Эргономика, материалы, дизайн, особенности, методология, технология, гигиенический комфорт, утеплитель.*

### DESIGN OF COMFORTABLE OFFICE CLOTHING TAKING INTO ACCOUNT THE MICROCLIMATE CHARACTERISTICS OF AIR-CONDITIONED ROOMS

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**Annotation:** *In this scientific work, the microclimate conditions that are formed in working rooms equipped with air conditioning systems are studied, and on the basis of these factors, issues of ergonomic and functionally convenient design of office clothing are considered. The type of activity of office workers, age characteristics, aesthetic and hygienic requirements for clothing, as well as the thermal-physical and air permeability properties of fabric materials are taken into account. Useful for clothing designers, labor protection professionals, and light industry enterprises, it serves to create clothes that provide health and productivity in an office environment.*

**Key words:** *Ergonomic, materials, design, features, methodology, technology, hygienic comfort, insulation.*

Designing a comfortable office outfit in the conditions of work in air-conditioned rooms requires an integrated approach that combines the principles of modern ergonomics, clothing technology and microclimate management. This methodology took into account scientific research, practical design and user needs. Existing scientific sources recommend general approaches to designing clothing suitable for the microclimate, but it is the systematic methodologies for office clothing for an air-conditioned environment.

In such an environment, the human thermoregulation system operates in a state of constant stress, resulting in clothing gaining importance as a “thermal buffer” between the human and the environment. Therefore, it is an urgent issue for office clothing to have microclimate-appropriate, healthy, aesthetic and ergonomic characteristics.

Methodology: design a comfortable office dress in air-conditioned rooms.

Microclimate study: determining microclimate conditions in the office and assessing the effect on clothing.

Determination of microclimate parameters:

Air temperature (usually 21-24 °C);

Relative humidity (40-60%);

Air movement speed (0.1-0.25 m / s);

Radiation temperature.

Contrast of external and internal temperatures (important in the autumn-winter months).

1. In Workplaces, surveys are carried out between employees with microclimate measurements, since this contributes to uniformity of clothing (subjective thermal sensitivity). Physiological observations (sweating, sensitivity to coolness).

2. Setting ergonomic and physiological requirements on contrast of external and internal temperatures (important in the autumn-winter months).

1. In Workplaces, surveys are carried out between employees with microclimate measurements, since this contributes to uniformity of clothing (subjective thermal sensitivity). Physiological observations (sweating, sensitivity to coolness).

2. Setting ergonomic and physiological requirements. Clothing is suitable for the user and does not adversely affect health. Gender and age-related needs features of work activities (sitting at the computer, circle of movement and gatherings).

3. Material selection. Ensuring optimal thermoregulation and hygienic comfort in the microclimate.

Requirements for materials:

Air permeability (permeability);

Moisture absorption and evaporation (hygroscopicity);

Thermal insulation (thermal resistance);

Non-allergic resistance to static electrification;

Several different materials:

Mixed fiber fabrics (cotton + elastane, viscose + polyester) Requirements for materials:

Air permeability (permeability);

Moisture absorption).

4. Design and design solutions. Giving the user aesthetic, ergonomic and functional comfort.

Dress shape and silhouette: a design that is not too attached to the body, but allows air to circulate in a formal look.

Multilayer approach: the inner layer is moisture-absorbing, while the middle layer is insulating, and the outer layer is aesthetic and formal.

Ability to transform clothes 4. Design and design solutions. Giving the user aesthetic, ergonomic and functional comfort.

Dress shape and silhouette: a design that is not too attached to the body, but allows air to circulate in a formal look.

Multilayer approach: the inner layer is moisture-absorbing, while the middle layer is insulating, and the outer layer is aesthetic and formal.

Ability to transform clothes:

In Cool Zones: sleeve long, collar dress, in warm zones: fold the sleeve, open the collar, jacket with light material.

5. Optimization and final design.

Changes in fabric and construction based on Test results preparation of individual and general design drawings Gender and seasonal options Development.

Clothing in an air-conditioned environment is an important factor in maintaining human health.

The development of an office dress model adapted to the characteristics of the microclimate requires a complex approach to the processes of material, Design, Testing and evaluation.

Clothing developed through the recommended methodology:

Protects the body from the cold;

Provides “breathing” of the skin;

Maintains aesthetic and formal appearance (clothing in an air-conditioned environment is an important factor in maintaining human health).

Conclusion. This methodology serves to provide such indicators of office clothing as: ergonomics, thermoregulatory properties, aesthetic compatibility, compatibility with a modern microclimate through an integrated approach.

### LIST OF USED LITERATURE:

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