



ABOUT US

Metropolis is an independent company founded in 2005 delivering professional design services.

At the moment the company's staff numbers more than 150 highly qualified specialists allowing us to implement individual creative approach in each our project. Our strategic thinking, creativity and innovative design methods we successfully apply to design projects.

Our goal is to provide high quality services at all project stages through application of our knowledge and experience gained during cooperation with the biggest Russian and international design companies.

We strive for realization of the most ambitious ideas of our Clients in our projects build upon principals of quality, reliability of solutions, energy efficiency and professionalism.



VISION

We are aiming to be the best high-end engineering company in the field of design services in Commercial Real Estate segment on Russian and CIS market.

Understanding the market and taking into account modern requirements we seek for continuous improvement and accrual of our services added value to the Clients. Extending the service sector, in the first instance we care for sustaining strategic partnership with market leaders in their segments. We believe that the best result can be achieved only by creation of trustworthy and mutually beneficial relations with our Clients and partners as well as our employees.

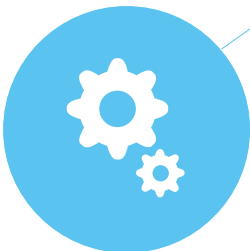
Our advantages are steadfast maintenance of the projects schedules within the budgets, flexibility and originality of solutions without loss of quality in line with effective project management.

MISSION

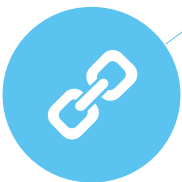
Reliability, comfort and safety. Engineering design services based on the principals of sustainable development on B2B market in Russia and CIS.



Partnership, trust,
mutually beneficial
relations



High-end, flexible
and original solutions



Reliability, comfort
and safety



Maintenance
of the project schedules
within budgets



SERVICES

Metropolis Company carries out the complex design of buildings and construction projects (including high-rise buildings), as well as all required approvals with local authorities in the following categories:

Structural and space planning solutions

Structural design and calculations

- Reinforced concrete structures
- Steel structures
- Wooden structures
- Masonry structures
- Complex structures
- Foundations design in complex geological conditions, excavation shoring (wall in trench, sheet pile wall)
- Reconstruction, planning for structures protection and strengthening. Assessment of the impact of new construction on existing adjacent buildings
- Static and dynamic spatial calculations, analysis of mode of deformation of structure in linear and nonlinear problems
- Progressive collapse calculation

MEP systems

Mechanical systems

- Heat supply and heating
- Ventilation and air conditioning
- Cold supply and multi-zonal systems (VRV/VRF)
- Smoke protection

Sanitary systems

- Domestic, process and rain water sewer system
- Cold and hot water supply
- Internal fire-fighting main
- Automated water fire-fighting system

Electric systems

- Earthing and lightning protection
- Electric supply (up to 35 KV)
- Electrical lighting



Low current systems

- Telephone system
- Private automatic branch exchange (PABX)
- Terrestrial and satellite TV
- Broadcasting systems
- Electric master clock system
- Structured information systems (Structured cabling systems, Raceway systems, Data transfer networks)

Fire safety systems

- Automated Fire Warning system
- Evacuation Management System
- Automated water fire-fighting system
- Fire-fighting main

Special chapters

- Energy efficiency
- Construction organization plan (POS)
- Disassembling organization plan (POD)

MEP systems

- Security alarm system
- CCTV
- Access control system
- Automatic fire alarm
- Fire Warning and Evacuation Management System
- Building management systems

- Automated module gas fire suppression system
- Smoke ventilation
- Automated fire-fighting systems management system

- Project for implementation of construction works (PPR)
- Protective deratization system (OZDS)

Design documentation can be provided in both Russian and English for the following design stages:

- Concept
- Sketch design
- Project documentation
- Detail design
- Working documentation

TYPES OF PROJECTS



Main Media-center for Olympic Games 2014

MIXED-USE BUILDINGS AND COMPLEXES

Guarantee of smooth operation of all systems, safety, comfort and energy efficiency

Resent trend for deindustrialization of cities led to increased attention to mixed-use construction projects, which combine more than three functional areas.

Mixed-use buildings design is a complex technical process, where specifics of the objects have to be carefully considered. Metropolis specialists successfully implement differentiated approach towards design of the separate functional areas of such buildings. Besides, at the design stage we take into account a necessity of integration of all parts of the project into organic whole.



Mixed-use projects developed by our engineers are based on the synergy principal and aimed at the satisfaction of the consumers' requirements in scale of the entire complex and particular zones. Our design solutions guarantee smooth operation of all systems, safety, comfort and energy efficiency.





Mixed-use complex with Kempinski Hotel

HOTELS

Nowadays Russian hotel market is going through a period of dynamic development. As such Hotels are a special type of mixed-use buildings, therefore special norms are applied to the design.

Engineering utilities are of no less importance than architectural concept of the building. Hotel design should take into account hotel operator corporate requirements, safety parameters and hotel class. Complexity of the engineering utilities of such buildings is determined, besides room stock, by the various process zones, such as bars and restaurants, swimming pools and SPA centers, night clubs, household and service areas, process and utilities rooms, etc. Often on the territory of the hotel are located such mixed-use areas as cinemas, conference halls, business centers, shopping malls and exhibition halls.



Metropolis participated in the development of a number of the hotels and resorts construction and reconstruction projects across Russia. Our projects comply with the highest requirements of international hotel operators and local legislation in the context of aesthetics quality, ergonomics and energy efficiency.

Design projects
in accordance
with international hotel
operators requirements
and local legislation



OFFICES

Projects design
in accordance
with "green standards"

Among projects designed by Metropolis there are a lot of Commercial Real Estate objects such as office complexes. As a result of our collaboration with international architectural bureaus and developers several unique projects were realized including but not limited to administrative-office complexes, retail and entertainment centers, hotels and business centers, etc.

Working on an office building project our engineers create comfortable environment, which enhances working efficiency of the future tenants' staff.

One of our advantages is the development of the sustainable design solutions in accordance with "green standards" requirements: BREEAM (Building Research Establishment Environmental Assessment Method) and LEED (Leadership in Energy and Environmental Design). Application on the green technologies contributes to reducing negative environmental effect, creation of the comfortable conditions via higher air quality, heating and acoustic characteristics, minimize maintenance expenses by means of higher effectiveness of energy and water consumption. Moreover application of the green standards ensures shorter pay-off period for leased premises and higher tenants loyalty.





Residential Complex Old Bitsa

RESIDENTIAL COMPLEXES

Residential building design is one of our core competencies, starting from low-rise buildings and cottages to luxury high-rise complexes. Our portfolio includes elite multifunctional complexes with underground parking, fitness-centers, shops, cafes and beauty salons as well as cottage villages and townhouses projects.

Optimal structural solutions in residential design projects facilitate space planning flexibility, optimization of the fit-out and construction materials.



Designing a residential complex engineers of Metropolis company differentially treat each object making provisions for construction phasing and possibility for commissioning separate parts of the projects. All our projects are designed to create comfortable, sustainable and efficient living conditions.

Consideration of the phasing and possibility for commissioning of the separate parts of projects



Mixed-use complex Skladochnaya

HIGH-RISE AND UNIQUE BUILDINGS

One of the advantages of our company is the experience in high-rise projects development. Buildings higher than 75 m allow maximum economy in usage of the expensive land plots, although requiring particular approach towards project development.

Special attention
to structures safety

While developing a high-rise building project special attention is paid to security and stability of the building structures taking into account norms on wind force, solar radiation, rain, etc. In most cases modern high-rise buildings are mixed-use objects where simultaneously can be

located residential areas, shopping malls, offices and hotels, and are therefore a place of gathering a large number of people, what preconditions design solutions to ensure the integrated safety of the complex.

Taking into account buildings' saturation with engineering utilities, special requirements are applied to provide for necessary level of comfort and energy efficiency. For example when designing water supply and sewerage system it is important to take into consideration gravitation. Artificial ventilation systems are used in high-rise buildings and their primary objective is to maintain comfortable temperature and humidity levels of the premises in design projects. To ensure immediate decision making in emergency situations, and constant monitoring of the systems functioning, all engineering utilities must be connected to centralized building management system. All these and other factors, depending on the functionality of the building are successfully considered by our specialists in the process of the high-rise projects development.





SHOPPING MALLS

Modern shopping malls combine maximum number of merchandise and services for saving time of the buyer.

Shopping malls are heavily crowded areas and consequently their design should be developed with respect to the such buildings requirements.

Our specialists take into account not only visitors safety parameters but also their comfort.



When designing shopping centers special attention is paid to the air conditioning and ventilation systems, allocation of equipment for food courts and entertainment centers, as well as presence of the comfortable parking on the territory of the mall.

Metropolis has an extensive experience in development of the detached shopping malls, as a part offices, hotels or entertainment centers.

Extensive experience
in shopping malls
design



Stadium FC Krasnodar

SPORTS FACILITIES

Individual approach
depending
on purpose, level
and scale of the facility

In the context of preparation for hosting Sochi 2014 Olympic Games and 2018 FIFA World Cup, construction of sports objects and ventures across Russia has moved to the new level. In cooperation with leading international design companies Metropolis engineers work on several stadiums, sports arenas and training centers in several Russian cities. Designed objects satisfy requirements of the International Olympic Committee, FIFA and “green standards”.



Design of such sport facilities as stadiums involves calculations of long span structures, which should satisfy the highest safety requirements. During design of engineering utilities we consider process requirements for sports facilities equipment and pay individual attention to the purpose, level and scale of the facility.



WATER PARKS

Water parks are amusement parks with various water attractions. Indoor water parks represent complex hydro technical facilities with artificial climate, creating summer vacations experience all the year round. Besides water attractions there are saunas, baths, tanning salons, massage rooms and SPA centers, cafes and restaurants, bowling, etc. for proper family holidays.

Water parks design is a complex technological process dependent on the object area, number and type of attractions, auxiliary services provided on the water park territory, etc. Careful attention is paid to the special



design chapters, such as water treatment, structural solutions, artificial ventilation system, hydro isolation of the wet zones, access control systems, etc.

Experience of the Metropolis employees enables us with development of the Water parks projects, as well as swimming pools and SPA centers, applying latest equipment and considering all project peculiarities for creation of the comfortable conditions for leisure.

Use of modern equipment, consideration of all project specifics





UTILITIES AND CONSTRUCTION MANAGEMENT PLAN

Ensuring optimal functioning and operations of the objects

Buildings and structures design is inseparably connected with energy resources supply. In order that our projects weren't taken out of the construction context, engineers of Metropolis company carry out development of the on-site utilities including all complex of engineering networks for ensuring of functioning and operation of the objects.

Experience and professionalism of our experts allows developing projects focused on minimization of heat losses in the heat supply main networks, ensuring optimum hydrobalance of the territory, supplying



objects with pure drinking water and domestic sewerage, as well as electric power transportation from external sources directly to the buildings.

Besides development of the on-site utilities design our company also offers the services in development of POS chapter (Construction management plan) and PPR (Works Execution Plan) which allow optimization of the construction process, provisioning for the rational use of construction machinery, increasing general construction safety and quality of works.



Phones:

+7 (495) 721 - 29 - 86 | +7 (495) 721 - 29 - 87

+7 (495) 721 - 29 - 54 | +7 (495) 980 - 68 - 87

Fax:

+7 (495) 980 - 68 - 89

info@metropolis-group.ru

[www. metropolis-group.ru](http://www.metropolis-group.ru)

Entrance 5.8, bld.9/5, Godovikova St.,

Business center “Kalibr”

Moscow, Russia, 129085