

ATELIER DEK is a brand operating since 1997 as an umbrella for technical specialists in the DEK a.s. holding. ATELIER DEK is engaged in research and development, designing waterproofing and thermal insulation systems in construction projects and specialised activities in the area of construction pathology diagnostics, waterproofing engineering, building engineering physics and energy.

www.atelier-dek.cz

# **DEKPROJEKT s.r.o.**

DEKPROJEKT s.r.o. is part of the ATELIER DEK brand, offering highly specialised services in the area of building insulation, building engineering physics and energy, building certification and development of construction software on the Czech and Slovak markets. Many employees of the company publish articles in professional media, lecture at conferences, teach in specialised schools and participate in the work of technical standardisation commissions. DEKPROJEKT s.r.o. is an expert institute appointed by the Ministry of Justice of the Czech Republic and an accredited international/European testing laboratory. The company also operates NEMOPAS, a service consisting in inspections of properties.



**Ing. Luboš Káně, P.h.D.** Technical director of DEK a.s.



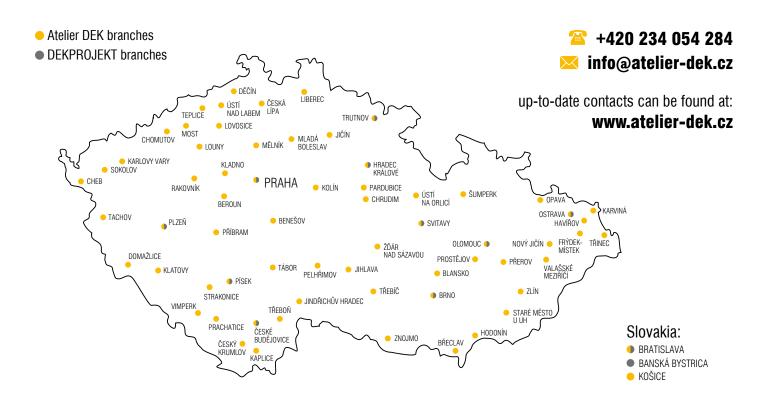
**Ing. Ctibor Hůlka**Director of
DEKPROJEKT s.r.o.



**Doc. Ing. Zdeněk Kutnar, CSc.** Co-operating court expert



#### DEK a.s. SERVICE **PRODUCTION TRADE** DEK ATELIER ATELIER DEK **GSERVIS DEKMETAL DEKWOOD** DEK DEK **DEKPROJEKT** G SERVIS CZ DEKPROJEKT DEKMETAL **DEKWOOD** Stavebniny DEK Stavebniny DEK s.r.o. (SK) s.r.o. (SK) s.r.o. s.r.o. s.r.o. s.r.o.



# **SPECIALIZED SERVICES**



# EASING ACCESS TO SUBSIDIES (NEW GREEN INVESTMENT SCHEME, OPERATIONAL PROGRAMME ENVIRONMENT, IROP)

Preparation of complete sets of documents and administration of applications for subsidies. Free consulting and assessment of applications at energy consulting and information centres (ECIS).



### **DESIGNS, SUPERVISION**

Preparation of design documents in the area of insulation engineering (waterproofing, thermal insulation and soundproofing).



### **EXPERT REPORTS AND EXPERT ACTIVITIES**

Specialised activities in the area of insulation engineering focused on diagnostics and remedying defects and failures of building structures.



### **ENERGY**

Preparation of all standard and specialised energy documents (energy performance certificate, audit, expert report) under the applicable legal regulations.



### **ENERGY MANAGEMENT**

Consultancy and preparation in introducing, maintaining and improving energy management systems in accordance with ČSN EN ISO 50001.



### **BUILDING CERTIFICATION** (BREEAM, LEED)

Comprehensive certification of buildings in the relevant systems. measurements and preparation of individual documents for certification purposes.



### **ACOUSTICS**

Accredited measurements of soundproofing, reverberation time and noise. Preparation of noise studies, designing and assessing soundproofing systems



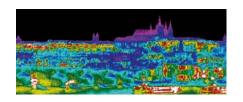
### LIGHTING AND EXPOSURE TO SUNLIGHT

Shading and sunlight exposure studies. Designing and expert reports concerning daylight and artificial lighting in buildings. Accredited measurements of artificial lighting.



### THERMAL ENGINEERING

Designing and assessment of composition and details in terms of heat and humidity spread. Assessment of thermal stability in rooms in summer and winter.



### THERMAL DIAGNOSTICS AND BLOWER DOOR TEST

Measuring surface temperatures and detection of thermal bridges using a thermal imaging camera. Accredited measurements of air-tightness using the blower-door method. Long-term measurements of air parameters (T, RV, CO<sub>a</sub>).

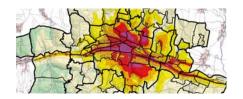


**PASSIVE HOUSE CONCEPT** (DESIGNING AND DESIGN-RELATED SUPPORT) Preparation of designs and individual documents (studies, energy evaluations, window shading and calculations of thermal relations) for buildings in the passive energy standard.



### **FIRE SAFETY**

Designs and expert reports of fire-safety design of structures, certification of products, compositions and frames for the market and room integrity testing.



### **ECOLOGY** (EIA, DISPERSION STUDIES)

Preparation of EIA studies and individual documents such as dispersion studies, noise studies, life cycle assessments (LCA), environmental product declarations (EPD), etc.



### **BUILDING SERVICES**

Designing heating systems (including control), solar thermal collectors and ventilation systems for new and restored buildings.



### STRUCTURAL ANALYSIS OF STRUCTURES AND FRAMES

Designs and structural analyses of load-bearing structures of new and restored buildings, specialising in wooden frames.



### **EDUCATION**

Easing access to subsidies for education and employee training from EU funds. Preparation and delivery of training. Teaching in specialised secondary schools and universities.



### PROGRAMMING CUSTOM-MADE APPLICATIONS

Developing applications from the user-interface concept, graphics, programming, testing, to providing technical support to users.



# TECHNICAL SUPPORT FOR THE DEK SALES OF CONSTRUCTION MATERIALS

Consultations on design and material solutions.

# DEKPROJEKT EXPERT INSTITUTE

We have operated as an expert institute since 2012. The expert institute deals with residential, industrial and farm buildings, roofs, envelopes, swimming pools and wet operations, building insulation materials and building engineering physics. The expert institute currently employs 8 court-appointed experts specialised in various fields.



# ACCREDITED TESTING LABORATORY

The laboratory has accreditation from the Czech Accreditation Institute and operates in accordance with a defined quality management system meeting the requirements of international standards. The laboratory performs the following activities:

- measuring sound proofing
- · measuring reverberation time
- measuring noise levels
- measuring airtightness of buildings using the blowerdoor test method
- · measuring artificial lighting



# NEMOPAS INSPECTION OF PROPERTIES

Nemopas consists in inspection and assessment of the technical condition of properties in terms of failures and defects, as well as the risk of failures, i.e. situations where the premises show no signs of failure but a failure may appear in the future.

www.nemopas.cz







DEKSOFT is a web portal containing, in particular, a set of calculation software for the building industry, in particular energy and building engineering physics.

### www.deksoft.cz



### **ENERGETIKA** (ENERGY)

Software for calculating energy performance of buildings and preparing the energy performance certificate.



### **DUTINA** (CAVITY)

Software for calculating heat and humidity spread in a ventilated air layer.



### KOMFORT (COMFORT)

Software for calculating thermal stability of rooms.



### TEPELNÁ TECHNIKA 1D

(1D HEAT ENGINEERING)

Software for thermal calculations and composition assessment.



#### FVE

Software for calculating and designing photovoltaic plants.



### **3D EDITOR**

Software for using graphic models in energy calculations.



### **AKUSTIKA** (ACOUSTICS)

Software for sound calculations and composition assessment.



### TZB (BUILDING SERVICES)

Software for calculating heat losses and dimensioning heating systems.



### **ANTIRADON**

Software for calculating radon concentrations and designing radon mitigation measures.



### **VARIANTY** (VARIANTS)

Software for economic and environmental assessments, preparation of energy reports and energy audits.



### STANDARDY MATERIÁLŮ

(MATERIAL STANDARDS)

Specifications of materials for designing public contracts.



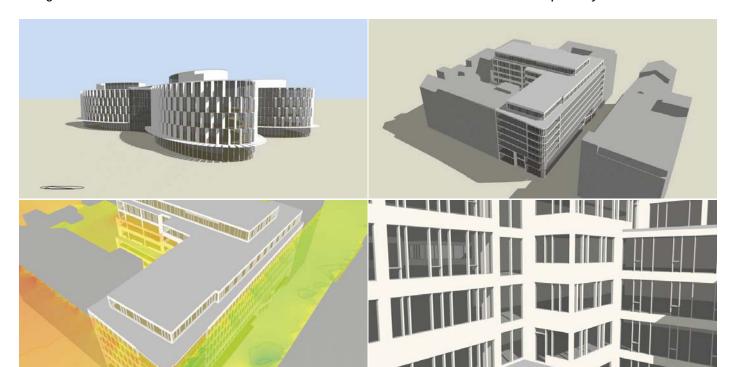
### NZÚ (NEW GREEN INVESTMENT SCHEME)

Software for energy assessments within the New Green Investment Scheme (NZÚ) subsidy programme.



### www.designbuilder.cz

We are an official distributor of the DesignBuilder software for the Czech Republic, Slovakia, Poland and Hungary. DesignBuilder is a calculation software for dynamic simulations and generation of 3D models. DesignBuilder contains 11 modules for various fields. The modules can also be used separately.



# SEMINARS, CONGRESSES, TRAINING, EDUCATION, PUBLISHING

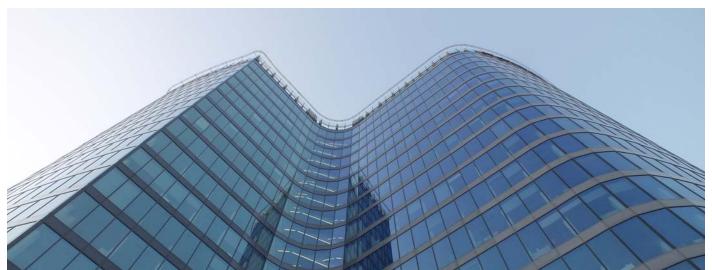
We regularly publish our experience from commercial contracts and internal research tasks at our company website www.atelier-dek.cz and in professional media. We give lectures at seminars and conferences. We teach at secondary technical schools and technical universities. We act as supervisors of bachelor's and diploma theses and we review them. We take part in the work of technical standardisation commissions and professional associations.



# BREEAM, LEED, SBTOOLCZ, COMPREHENSIVE BUILDING CERTIFICATION

The BREEAM, LEED and SBToolCZ certification involves a comprehensive assessment of structures in terms of environmental impacts and user comfort. We provide comprehensive certification and preparation of individual specialised documents for the purpose of obtaining the required credits.







**Mill Colonnade**, Karlovy Vary – design documents and author's supervision in the restoration of the high-reliability composite insulation of a terrace (double waterproofing system).



**Curling hall**, Prague – thermal diagnostics and measurement of airtightness of a hall with the aim of localising defects in the roof covering.



 $\begin{tabular}{ll} \textbf{Aquapalace \c Cestlice} - room \ and \ building \ acoustics \ from \ design \ to \ final \ measurements. \end{tabular}$ 



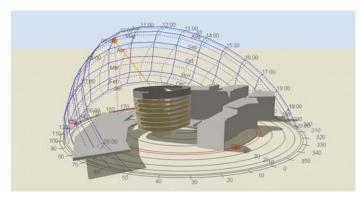
**Aquacentrum Bohumín** – expert report on the thermal and humidity characteristics of the roof covering. Design and author's supervision in repair work.



**Park D8, hall 6, stages I. and II.,** Zdiby - comprehensive BREEAM certification for a distribution hall with an internal volume of 550 000 m $^3$ .



**ČEVAK, a.s.** – energy audits for energy management and for 48 buildings all over the Czech Republic.



 $\label{eq:GREEN POINT, Prague - preparation of the CFD analysis, dispersion study and structural physics calculations for a planned administrative building.$ 



**Janáčkovo kulturní centrum (Janáček Culture Centre)**, Brno – expert report on the shading of the nearby residential, commercial and administrative buildings.