

NON-PROFIT LIMITED LIABILITY COMPANY FOR **OUALITY CONTROL AND INNOVATION IN BUILDING**

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OUALITY CAN BE MEASURED

















ENERGY EFFICIENCY



SUSTAINABILITY





QUALITY | SAFETY | EFFICIENCY

Established in 1963.



EXPERTISE AND QUALITY ANYWHERE IN THE COUNTRY

As the largest complex testing base for various construction tasks in Hungary, we perform **more than 1,000 types of tests - 700 of which are accredited** - with a national laboratory network to serve the domestic and international market.

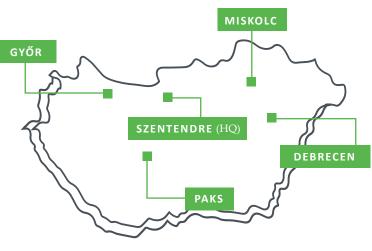
Thanks to our nearly **sixty years of experience** in various fields of construction (loadbearing structures, building physics, fire protection, chemistry, building engineering, mechanics) and our **trained, competent professionals**, we are able to provide high-quality services.

Building and building material industry approval, on-site and laboratory testing, inspections, technical expertise and innovation research are part of our day-to-day work.

As an **independent professional institute**, we guarantee with the up-to-date diagnostic instrumentation that the construction products and technologies meet the current legal and quality assurance requirements of Hungary and the European Union, so our clients can also provide high quality with their products and services.

Our Central Material and Structure Testing Laboratory and Fire Protection Testing Laboratory renewed in 2018, as well as our Material Testing Laboratories in Eastern Hungary (Debrecen) and Western Hungary (Győr) are suitable for executing a wide range of laboratory and on-site inspection tasks related to the construction industry.

Through our branch offices and mobile laboratories, we are able to carry through our activities nationwide.



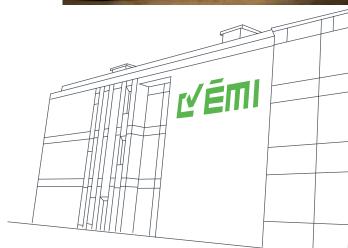












CONFORMITY ASSESSMENT ACTIVITIES

In our Conformity Assessment Center, we perform the technical assessment and certification activities required for the distribution and installation of construction products. The performance certification of construction products is carried out outside the boarders of Hungary as a Notified body (Notified body number: 1415) in accordance with the requirements of the Construction Product Regulation.

We kindly recommend our personal/online consultation during which we will introduce you to the mysteries of the documents that establish the distribution and installation of construction products.

COMPLETE IMPLEMENTATION OF LARGE INVESTMENTS, TECHNICAL AND DESIGN INSPECTION

With more than half a century of professional experience, with our experts and a wide range of laboratory backgrounds, we achieve the tasks of implementation, design inspection and technical inspection of priority investments, supporting the customer in its high-quality construction.

We are present at such large investments as the Károlyi-Csekonics Palace; the Teleki-Tisza Castle in Nagykovácsi; Riding Shall, Guardhouse and Stöck Stairway renovated within the framework of the National Hauszmann Program; the Carmelite Monastery; or the Castle Bazaar.



TECHNICAL ASSESSMENT AND CERTIFICATION ACTIVITIES

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RESEARCH-DEVELOPMENTINNOVATION AND INTERNATIONAL PRESENCE, SPONSORSHIP PROGRAMMES

We focus our research support and R&D activities specifically on **market-oriented research and development**, in particular on projects implemented in cooperation with academia, research and testing institutes, as well as industry partners. ÉMI also participates in national research, technical development and educational programs for the development of architectural culture. As a member of the **Bay Zoltán** National Applied Research Institute **Network**, we will also conduct mentoring in construction research development from 2022 onwards.

As a cooperating or consortium partner of international institutes, we are engaged in research and development projects at the international level. We are also actively involved in the EU's international cooperation programs, in particular the **Horizon Research Framework Program**.

Representing national sectoral interests, our company actively participates in the work of many international professional organizations and innovation networks. Based on the agreement with the Covenant of Mayors for Climate & Energy (CoM), we support local and county governments in the strategy-making processes of sustainable urban development as a "Country Coordinator".

We have also entered the international field in socializing innovation. ÉMI has successfully organized the Solar Decathlon Europe 2019 international university competition in housebuilding, which being further developed the **ÉMI National Prototype Park** will be opened in 2023, supplemented by prototypes presenting modern building elements available on the domestic market and with information and event hall. The main target audience of the visitor center presenting modern technologies will be residential investors planning to renovate or build, but the park will also be a central showcase for Hungarian professional events and innovative construction solutions.

Our company plays a significant role to fulfill the tasks of **organizing and supporting tenders** related to the development of the construction sector.









TECHNICAL REGULATIONS, TECHNICAL DIRECTIVES FOR CONSTRUCTION

ÉMI also has a key position in the field of building regulations. Our experts express opinion on the construction legislation and, if necessary, propose amendments. We participate in the work of the 56 Technical Committees of the Hungarian Standards Institution, holding five positions as chairman. In the committees, our experts participate in the development of new construction standards and the review of existing ones.

We monitor changes in domestic and other European standards and take part in the editing of related publications.

Our company performs the coordination tasks of the Technical Regulation Committee in the building sector, thus managing the entire preparation process of **Technical Directives for Construction**. Within this framework, we make proposals on topics, prepare drafts in the areas of our professional competence, participate in the review of documents written by invited experts, ensure the professional publicity and the availability of the completed directives.

By our activities in the field of technical regulation, **we act** as a bridge between state regulation and stakeholders.







PROFESSIONAL EVENTS, TRAINING, KNOWLEDGE TRANSFER

ÉMI has a wide range of knowledge in the Hungarian construction profession and unique experience in quality control activities. We use this to deliver benefits in developing **professional competencies**, as well as through **professional events** and informing the public.

In cooperation with professional construction organizations, higher education research centers, vocational training centers in Hungary and relevant international organizations, we provide **knowledge transfer** by our employees with extensive experience and expertise in the framework of joint projects.

Moreover we organize conferences for construction professionals, and we publish the relevant information for single-family house construction on a public information portal.





QUALITY, INNOVATION, EXPERTISE

ÉMI's predecessor, the Construction Quality Inspection Institute, was established in 1963. Today in Hungary, ÉMI is the largest quality control innovation institution for building material industry and building sector, a relevant actor in the Hungarian construction industry and a professional intellectual center. We carry out our activities nationwide, and we prove our experience, knowledge and expertise accumulated over more than half a century on both national and international fields.

The operation of ÉMI is still determined by the basic goals of its establishment, but at the same time **we shall meet the expectations and challenges of the present**. Not only the growing tendency and direction of the Hungarian construction industry shall be followed, but we must continue to operate in a proactive and prepared manner.

Accordingly, ÉMI's activities today are very diverse, as follows:





engineering expertise, laboratory tests



quality control



complex building diagnostic services



conformity assessment



research,
development and
innovation



nuclear facilities expertise



complete implementation of priority investments, technical and design inspection



supporting the work of building inspection



market-oriented national and international projects



implementing and supporting tasks of tenders in the construction sector



technical regulation, preparation of directives



promoting cooperation within the industry



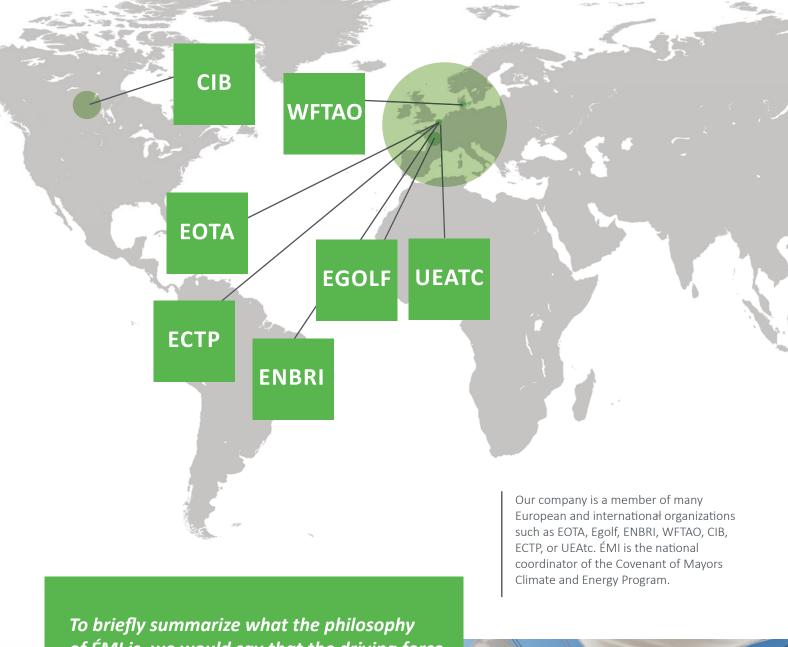
awareness-raising towards energy efficiency and sustainability at professional and public level



organizing professional events



knowledge transfer





ÉMI CONSTRUCTION TESTING LABORATORY (ÉMILAB)



QUALITY IS MEASURABLE

In Hungary ÉMI Nonprofit Kft. has the largest testing laboratory for construction providing complex services. Our testing activitiesmore than 700 accredited test procedures- are carried out by our ÉMI Construction Testing Laboratory accredited according to MSZ EN ISO/IEC 17025: 2018 and located in one of the most modern branch laboratory buildings in the country in our Industrial and Innovation Park in Szentendre since 2018 spring.

ÉMI OFFERS ITS SERVICES WITH A WIDE RANGE OF ENGINEERING KNOWLEDGE AND EXPERIENCE IN THE FIELD OF LABORATORY AND ON-SITE INSPECTIONS

The staff of the ÉMI Construction Testing Laboratory performs thousands of tests and type tests every year, as well as around 100 tests related to ETA, NMÉ, ATB and certification. In addition, they cooperate in ÉMI's research and development projects, work on tasks related to nuclear expertise, perform technical inspections of government offices, carry out design inspections, and participate in the technical directive program, and provide information to construction professionals at conferences and exhibitions.

The quality of the tests is guaranteed by our trained and experienced experts, engineers, working with up-to-date laboratory instrumentation and operating a multi-level external and internal control system (NAH-1-1110-2018).

The testing laboratory of ÉMI Nonprofit Kft. has been registered in the European Union as a designated, notified testing organization (Notified Body: 1415). The Fire Testing Laboratory is a member of the European EGOLF.

LABORATORIES AND BRANCH OFFICES OF THE ÉMI CONSTRUCTION TESTING LABORATORY (ÉMILAB):

Central Material and Structure Testing Laboratory (Szentendre, Dózsa György út 26.)

Fire Protection Testing Laboratory (Szentendre, Dózsa György út 26.)

Material Testing Laboratory in Western Hungary (Győr, Vágóhíd u. 2.)

Material Testing Laboratory in Eastern Hungary (Debrecen, Köntösgát sor 1-3.)







ÉMI NONPROFIT KFT. PERFORMS TESTING ACTIVITIES IN THE FOLLOWING CASES:

- based on product testing order
- initial type test performed in the framework of the examination of the constancy of performance of a construction product as a designated and notified test organization
- technical assessment of a construction product as a Technical Assessment Body (TAB) designated for the purpose of issuing or maintaining National Technical Assessment or European Technical Assessment
- determining fire protection and fire resistance characteristics related to the issuance of a Fire Conformity Certificate

- as part of expertise activities
- in the context of expertise related to nuclear facilities
- in the framework of issuing application certificate of construction product
- for internal or external assignments as part of a research activity
- in the framework of testing and expertise activities of building control
- On-site inspections, building diagnostics

THE TESTING FIELDS ARE VERY DIVERSE, INCLUDING THE MAIN PRODUCT GROUPS AS FOLLOWS:

- masonry elements, ceramic products,
- normal and lightweight concrete, fiber reinforced concrete, aggregates, admixtures, artificial stones, natural stones,
- metal products, rebars, strands, sheets, fasteners, screws,
- fiber and plastic based thermal insulation materials, ETICS,
- civil engineering products, sewage and hydraulic engineering products,
- cement, quicklime, gypsum, masonry-plaster-mortars, cement- and gypsum-bonded composite products, adhesives,
- impregnating materials, dyes, plasters and renders, anti-corrosion and fire-retardant coatings, wood preservatives (fungi and fire), resin coatings
- plastic waterproofing sheets, flexible and laminate flooring materials, plastic door and window profiles, plastic roofing sheets (PVC, PMMA, PC, GRP), plastic coverings, artificial grasses, hot melt adhesives, joint sealants and profiles,
- bituminous waterproofing products, shingles, bituminous adhesives, sprayed and smeard bituminous waterproofing, bitumens, civil engineering insulation
- windows, balcony doors, exterior and interior doors, curtain walls, insulating glass, non-load-bearing walls,
- prefabricated reinforced concrete building elements, prefabricated reinforced concrete frame systems, steel-framed building frames and secondary components, scaffolding, plastic pipes and fittings
- central heating, radiators, heat exchangers, heating circulators, steel, copper, plastic, and multilayer pipe fittings,
- solar energy utilization equipment,
- chimney structures,
- drain and sewer pipes, equipment (baths, washbasins, bidets, toilets, sinks, steam cabins), faucets, drain and control fittings,
- ventilation and air conditioning, fans, heat exchangers, humidifiers, supply and exhaust components,
- gratings, air ducts, fire dampers, smoke extraction fans.

NATIONAL COVERAGE

- Laboratories in Szentendre
- Brand offices on the countryside
- Mobile diagnostic instrumentation





More than 1,000 test procedures

More than 700 accredited tests



More than 700 testing devices



Individual staff

- 40 engineers
- 20 technicians



More than 10,000 test samples per year

More than 1,000 concrete elements, concrete cubes



More than 1,000 rebars, strands



More than 1,000 masonry elements, roofing elements



More than 1,000 insulation materials



More than 1,000 types of mortar and adhesives



More than 100 windows and doors



Nearly 10,000 documents are issued each year

More than 1,000 test reports



Hundreds of evaluation and classification reports



More than 100 type test reports



More than 100 Type Test Certificates and Fire Conformity Certificates





MINISTOR

Sustainability made MINIMAL SIZE

Minimal Size Thermal and Electrical Energy Storage System for In-Situ Residential Installation is a project funded by the European Union's Horizon 2020 research and innovation programme to offer a sustainable solution to harness the energy efficiency potential of the European building stock.

MiniStor aims at designing and producing a novel compact integrated thermal storage system for achieving sustainable heating, cooling and electricity storage. Eighteen partners across the EU, Switzerland and the UK work together to harness the large potential of new and existing EU buildings providing an innovative solution for all.



METABUILDING LABS

Within the framework of the objectives for nearly-zero energy living future in Europe, the building sector is undergoing continuous transformation. The building industry needs a robust support system to meet these environmental standards. Towards this aim, the EU-funded METABUILDING LABS project will focus on assisting SMEs of the construction sector to reveal their innovation potential. To achieve this, METABUILDING LABS will reduce the entry barriers to testing innovative technologies in a network of testing facilities in real-time operating systems and living labs in 13 countries, enabling direct input from end-users during the final stages of growth.



BUS-GOCIRCULAR

One of the EU's goals is to stimulate demand for sustainable energy skills in the building sector, and increase the number of skilled building professionals across the building design, operation and maintenance value chain. The EU-funded BUS-GoCircular project aims to tackle the challenges associated with stimulating this demand, and through capacity building boost the number of capable professionals in the field. The project will develop and implement a circular construction skills qualification framework specifically focusing on multifunctional green roofs, facades and interior elements. Specific activities concerning companies, real estate, homeowners and local authorities will be developed, including support towards legislative changes through circular green procurement and recognition of skills.



POCITYF

The key to making cities safer, greener and more responsive to the needs of their citizens, businesses and organisations is to add layers of smartness as regards infrastructures, technologies and services. The EU-funded POCITYF project will deliver a set of positive energy blocks in the lighthouse cities of Alkmaar (Netherlands) and Évora (Portugal), and their fellow cities Hvidovre (Denmark), Ioannina (Greece), Ujpest (Hungary), Bari (Italy), Celje (Slovenia), and Granada (Spain). These blocks refer to a limited and socially well-embedded geographic area where the average local renewable generation exceeds its consumption. POCITYF aims to transform these cities' mixed-urban environments, with a strong emphasis on cultural and historical protected areas, into healthier and more accessible, reliable and competitive spaces for their citizens with a strong emphasis on cultural and historical protected areas.



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CONTACTS

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Branch offices

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+36 52 520 563 dma@emi.hu

Material Testing Laboratory in Western Hungary (Győr)

+36 96 312 431 gyma@emi.hu

HIGHER EDUCATION AND INDUSTRY COOPERATION CENTER (FIEK) - MISKOLC-EGYETEMVÁROS

3515 Miskolc, Egyetem út +36 46 565 111

ÉMI NATIONAL PROTOTYPE PARK

Information on cooperation opportunities: mintahazpark@emi.hu



