

Projects- Examines of built environment

Surveys of public institutions and community services, whether they are barrier-free and universally designed (since 2015 continuously):

Survey about 5 buildings of the Technical University of Budapest (2015).

Universal Design Information and Research Center has conducted a survey about 5 buildings of the Technical University of Budapest to diagnosis, if they are barrier free. The survey was conducted for the request of the University's Student Center.

The survey described the accessibility conditions of these buildings. The task was completed by the rehabilitation engineers and test group of people with disabilities of the Universal Design Center. The other purpose was to replace the specially designed solutions for accessibility with solutions designed for all members of the higher education. These would be advantageous for all, and would open new dimensions for people with disabilities, so that they can completely participate in higher education on equal basis with others. It is the interest of the whole society, that they can participate in higher education on equal basis with others. The participation of people with disabilities in higher education contributes to the diversity and creativity of students.

The steps of the survey: the method was in case of all 5 (K, Library, E, R and F) buildings the same, and the same applied to the parks between the buildings. The surveys contained a line of questions about accessibility and a work of engineers, that involved the test group and rehabilitation engineers of ETIKK. The survey contained

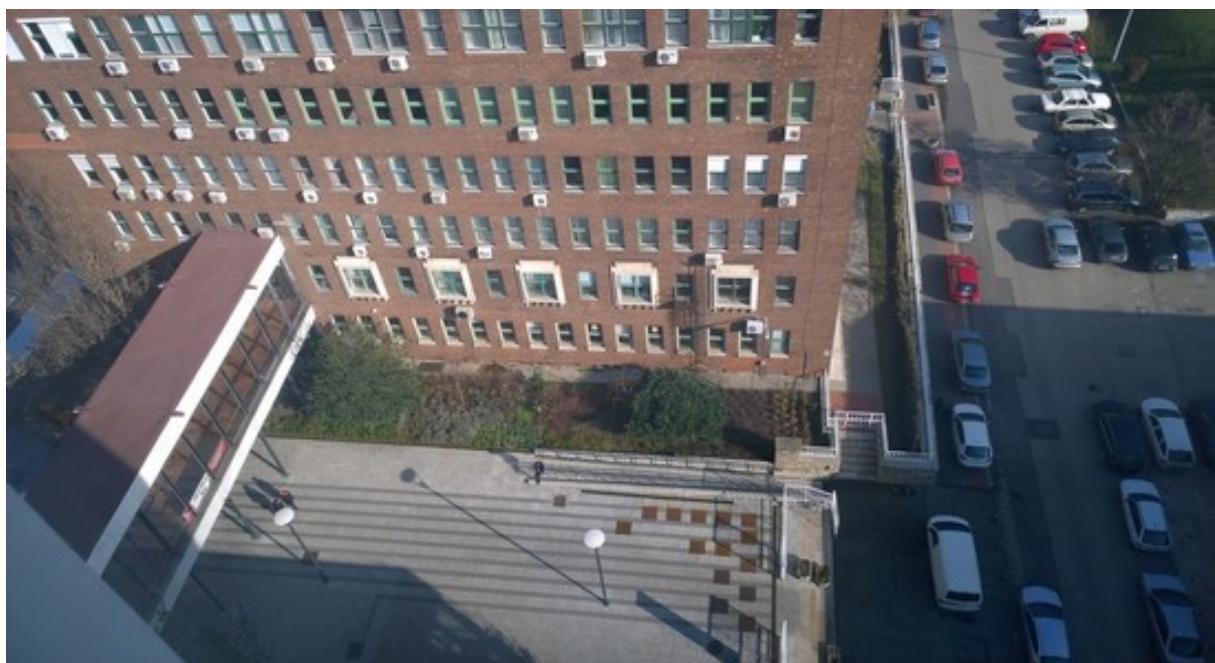


Fig 1. View from Building E of BME. You can see the connections between the sites around the buildings and the decorative-guiding lanes, 2015. Source: ETIKK

the diagnosis of the physical problems as well as a presentation of the infocommunicational deficits.

The documentation contained the good and bad solutions, the eventual deficits and the suggestions of solutions.

ETIKK has surveyed accessibility of the University's website, and suggested solutions for making it better.

A map was created about the accessible traffic routes of the campus and the accessible entrances and parking lots of the examined buildings.

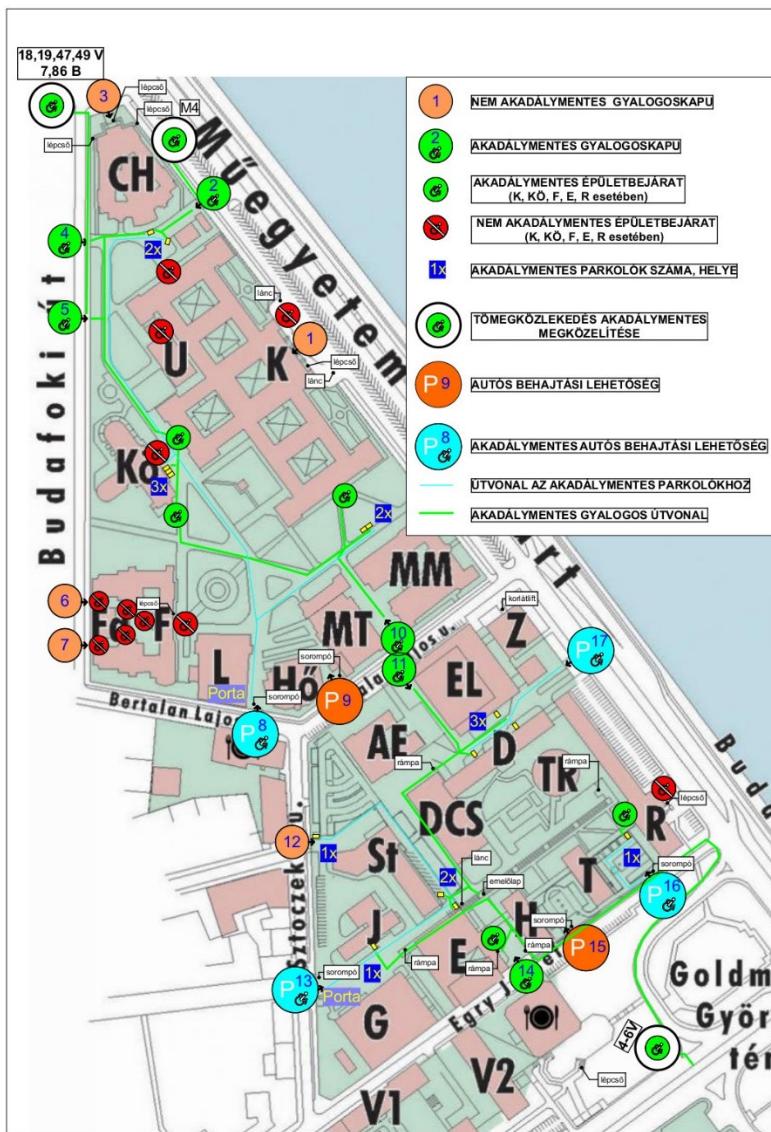


Fig 2 – traffic map of the campus's accessible connections, 2015. source: ETIKK

After the project – Survey of Building R, BME (2019)

The ETIKK was asked by the BME Student Service Directorate to conduct another accessibility survey in the last days of august 2019. It was made by the rehabilitation engineer and the experts by experience of ETIKK.

During the admittance all the stairs of the building were examined, including the services of the organisations there, and the accessibility of the neighboring buildings and sites. A photo documentation was also made about the survey. The development of the project is expected.



Fig 3 – Accessibility survey of Building R at BME, 2019. Experts by experience are working on site.

[**Survey of public facilities from 2015 continuously:
survey of hotels, clinics etc.**](#)

Accessible accommodations and real informations about them can significantly help guests with disabilities in seeking for and booking of accommodations; it is a good feedback for the providers about whether the actual and future facilities of them are able to serve the needs of the guests.

The universally designed accessories, structures, sanitaries, and equipments in the rooms and other facilities are state-of-the art elements, and represent a demanding implementation. The specially „disabled friendly”, medical solutions should be avoided (e.g. cut out toilet seat and sanitary), but the accessible solutions, that can be used by everyone, are recommended.

ETIKK surveys the rooms, community spaces, and approaching routes of hotels and other accommodation services, whether they have accessible and universally designed shaping and solutions.



Fig 4 – Accessibility and universal design survey of Hotel Flamenco. Examination of the suitability of the furniture and the ability to maneuver in the room by experts by experience. 2018. Source: ETIKK

ETIKK conducts expert examinations for healthcare facilities upon request or for investigating a complaint. The examination analyzes the service, the accessibility of the facilities (shaping, furniture) and its surroundings (transport, approachability). Steps of examination: site admittance, measurement if needed, and photo (and/or video) documentation. The result of the examination is summarised in a written form.



Fig 5 – Accessibility and universal design examination of the medical room. Péterfy Hospital, SM (Sclerosis multiplex) consulting room design examination 2018. Source: ETIKK.

Examinations of transport – city center, transport hub's local survey, from 2015 continuously:

ETIKK conducts continuously local admittances and relating surveys about transport. Public institutions, facilities with public function have a basic condition for accessible functioning and approach: it is the accessible environment.

Geometrical accessibility: surfaces and spaces of public spaces

For public pavements and geometrical space organisation it is advisable to construct the shortest accessible (better to say: universally designed) route. By paving seamlessness or tight fitting is important, the possibly homogeneous pavements with flat surface help those, who use aid (wheelchair, rollator, stick, artificial leg, pram, roller, skateboard etc.) at traveling. In case of historical districts, there are technical solutions, that by reconstructing only a part of the pavement, makes continuous progress possible for everyone.



Fig 6. – Budapest, Pesterzsébet center, user test and measurement with expert by experience and rehabilitation engineer. The cubestone pavement is not a good choice from an accessible point of view, because the steps run out and have no railing, and can therefore cause accidents. 2018. Source: ETIKK

Maintaining and making barrier free by the sustainer:

When forming traffic hubs with ramp or lift, the most important thing is, that it can be operated accessibly. The sustainers of the lifts must ensure, that the lifts can be used continuously (with cleaning and technical maintenance), otherwise the basic accessibility itself can be hurt. Therefore the ownership and the cooperation relations of the lifts must be settled, because it is often a big problem in Budapest. It is common in Budapest, that if an accessible route falls out due to the above mentioned problems, there is no alternative accessible transport solution instead of that.



Fig 7. Közvágóhíd ramp examination with experts by experience. The long ramp section without resting places can exhaust the manual wheelchair users easily. The tactile signals and handrails in two rows on both sides are appropriate. 2015. Source: ETIKK

In case of bigger transport hubs with more transport modalities (e.g. bus, metro, tram, train), where one can transfer, we recommend multilevel, complex accessible reconstruction. Barrier free lifts, ramps and comfort escalators are all needed for accessible transport at those facilities, that have a high traffic.



Fig 8. – Tram and metro station hub. Stairs, lift and comfort escalator are constructed. Fővám square 2015, Source: ETIKK