

Visit to the K-building of the BME on 16. 02. 2017

During the visit

1. **Try to find answers to questions formulated below** and make notes of them!

Function(s) of spaces?

Name, function and material of some different building constructions? (Like for example:

pavement coverings, stair-cases, walls, windows etc.)

Some important dimensions (of the building, of spaces of the building, of building constructions, of furniture etc.) ?

Connections of function(s) and dimensions? (Reason of some important dimensions)

For example:

Corridor network system – corridor width requirement (passing by of 2x2 circulating people)

"Education"-bay: *classrooms* (cca 50 m²: 7x7 m) and *departments* (studies + inner corridor: cca 7 m)

Connections of function(s) and materials used?

Tools of aesthetical expression? (Try to find examples: forms, material use, surface decorations, examples for connections between form and better functioning)

2. **Observe ground plan system organization principles!**

Connection between *two bay system*¹ and natural lighting requirement

Internal courts system to assure natural illumination of corridors

Vertical circulation system (staircases and elevators) – at corridor junctions, fire escape routes

Placement of *lecture halls* of two different magnitudes: at standing out building corners and between internal courts (**Why there?**)

Placement of lavatories and *toilettes* at corridor junctions (on internal side) (**Why there?**)

Positioning of festive hall (central meeting hall) and aula (**Why there?**)

Overall dimensions – capacity requirements

3. **Observe some other design principles, like:**

Utilizing functional needs for aesthetical expression tools

For example:

Protection of corridor walls - use of glazed ceramic tiles

Emphasized protruding cornice – protection of the façade from rainwater

Find more examples!

Material use: use of more expensive materials at central parts, on the main facade

Examples?

4. **Try to find elements of the loadbearing structural system**

Horizontal and vertical loadbearing structures

Structural materials used? **Make notes about them during the visit!**

Ways of over-spanning different spans: corridors, classrooms, lecture halls, aula (For example: brick vault, timber beams, reinforced concrete beams, steel beams, steel trusses)

Try to collect some examples!

Way of following load increase downward?

Where can you observe the consequence?

Multifunction use of loadbearing structures:

For example: External walls: loadbearing + space separation + thermal insulation, **.what else?**

¹ Two bay system: is a kind of ground plan formation consisting for example of three parallel walls and the spaces in between.