

## New Mechanics Hall for Ecole Polytechnique Federal de Lausanne

### Lausanne, Switzerland

The ME building, dedicated to the mechanical engineering department, was built by the Zweifel + Stricker + Associates team in the early 70s, during the first phase of development of the campus. Since the early 2000s, in an effort to promote its top-level teaching, research and innovation activities, and to attract more international students, the EPFL itself undertook several redevelopment operations. The campus and the buildings were refurbished, including the ME building which had gradually become cramped and was rapidly deteriorating. The façades combine two distinct architectural styles in one common material, giving the building a contemporary allure while paying tribute the legacy of the 1970s. The stainless steel mesh, on the one hand, evokes the scope of mechanical engineering,

while the northern façade is a direct reference to the molding envelopes of the neighboring buildings. The mechanical façade stands to the East, South and West of the building. The shape and dimensions of its modules, which were prebuilt in a factory before assembly, were determined by the EPFL's historic master plan. Each module is made up of two superimposed layers: an inner skin offering thermal insulation and soundproofing, and an outer solar protection, consisting of a frame holding the signature stainless steel mesh used by DPA since the Bibliothèque nationale de France. The modules are divided into three vertical panels, two of which are sliding and one static. The sliding modules can be deployed in front of the glass panes or superimposed on the third one. For thermal optimization purposes, the mobile panels are generally operated through a building automation

system, but they can also be maneuvered manually. The third module remains in a fixed position on top of the opaque façade panel. The stainless steel mesh panels are tilted away from the façade by a 5° angle, with different slants; this juxtaposition of oblique planes looks like a woven pattern, or a hinge seen on a macro level. The raw material used to build these automated components denotes the building's purpose as a space for scientific experiment. At night, the indoor lighting system amplifies these contrasts by showing the general layout, turning the hall into a lighthouse for the campus.

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| Environment:      | urban                                     |
| Use:              | panel façade                              |
| Material:         | 316 Escalé 7*1                            |
| Fabricator:       | GKD                                       |
| Architects:       | Dominique Perrault<br>Architecture        |
| Photographs:      | Vincent Fillon                            |
| More information: | perraultarchitecture.com<br>impetus-pr.de |





*Picture courtesy of Vincent Fillon*