

THE ENERGETIC BACKPACKS in BEC

César Martín Gómez

What should the equipment for multifunctional building used simultaneously by thousands of people be like? Let's start with the (architectural) logic:

- Such a space must allow for people's movement and carry out activity with total freedom, without the interference of the necessary and voluminous service shafts.
- Services must be easily accessible for maintenance.

Although these statements might be obvious, these design principles are not always correctly prioritized in the design process, adding problems to an already complex situation.

In the building we will focus on, however, we will see how logic has been employed since the beginning of the project. This way, the equipment design for the BEC becomes a reinterpretation of Kahn's theories for service and serviced spaces.

Each main hall, every exhibition pavilion, is suited with its own equipment space where the services are placed. An "energy backpack" sprouting out of the spatial conception of the architecture, since the architects had the service requirements for every pavilion since the starting point of the design. This solution helps, at the same time, to hide the complex perimeter circulation of the trucks.

On the other hand, I must insist –in the same way I try to transmit it to my architecture students– how the services and infrastructure, while they don't usually play the leading roles in buildings or urbanism, they are the elements that, like "technological x-rays", show the logic behind the design and construction of a certain architecture. Thus, inside the pavilions, the services might be enjoyed, used, and maintained, without being noticed by its users, and they do not appear on the fifth façade, the roof, since they are logically integrated in the architecture they belong to, a difficult thing to achieve in buildings of such characteristics and dimensions.

When the project for the BEC started, the energetic issues did not have the relevance they possess today. Nevertheless, beyond the possible installation of solar panels that would have given the idea of a relatively "sustainable" building, truth is that the construction rigor, its modulation, dry construction, and the common sense employed for the design of services and the maintenance ease during the life-span of the building, allow for a more coherent approach in the services design –and thus an energy saving on the long run– than the current verbal diarrhea usually employed when referring to a false integration of services in the building.