

UNIVERSITY LIBRARY CAMPUS II IN CAEN

Mission: technical assistance for architects

Subject: respect of the « standard » of simplified installation

This « standard » makes it possible to obtain a total flexibility of inner walls, spaces, sanitarities and networks at a cost equivalent to that of a traditional designed building . Moreover, this standard implies the possibility of considerable savings in the event of modifications or in later additions, in order to improve comfort of use and the functionality of the building.

Principal points:

- ✚ **Modification of the work and Circulation spaces**
- ✚ **Displacement and mobility,**
- ✚ **Easy localization of technical equipments**
- ✚ **Visual, acoustic and climatic comfort, Safety.**



Cost: 13 M €

Surface: 8500m²

Building owner: Vice-chancellorship of CAEN

Invitation to tender: 1999

Beginning of work: January 2000 End of work: June 2003

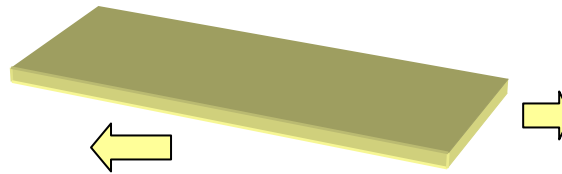
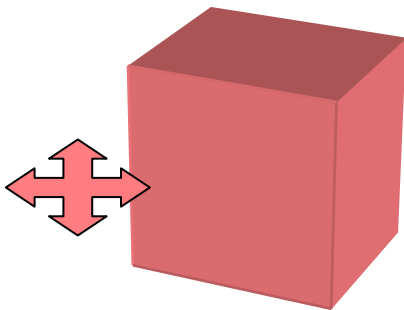


the total flexibility of ARCHITECTURALBUS

Why ?
Why ?

In order :

- ✚ to allow all the elements to be permutable.
- ✚ at any moment, to allow the modification of spaces, **volumes**, **surfaces**, **destinations**.



Housing
study rooms
offices ...



SOURCE OF SERVICE FOR an adapted Accessibility



Applied to buildings Networks

How ?
How ?

The installation of the network is totally Harmonised in the predisposed frame.

They all include :

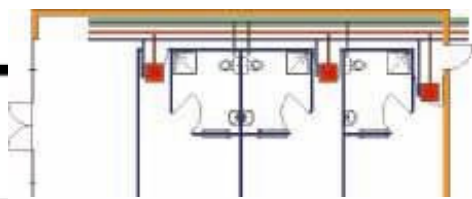
- ✚ equipment with reversible connections without degradation.
- ✚ regular derivations always accessible.
- ✚ a point of connection per cell.

They all are:

- ✚ accessible in any point.
- ✚ prefabricated and industrial.
- ✚ mountable and dismountable almost without any tool.

All network are concerned :the electric, liquid, gas, ...





PLUG AND PLAY INSTALLATION

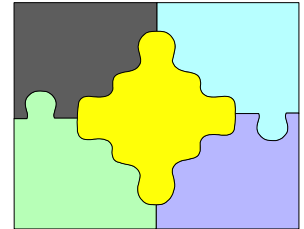


the structural elements

Comment ?
Comment ?

They all have :

- ✚ a modular concept which allows the instantaneous assembly and disassembling
- ✚ an implementation which only lasts a few minutes.



They all correspond :

- ✚ To the normative and legal requirements.
- ✚ To the well regulated "quality" processes.

REMOVABLE PARTITIONS, DOUBLINGS, CEILINGS...



STRUCTURE OF REMOVABLE PARTITION



Integrated EQUIPMENT



Closed REMOVABLE PARTITION



VARIOUS TYPES OF PANELS



CONCEPTION PHASE

The design phase uses a modeling **object** which allows:

- ✚ to fulfill instantaneously the user's needs throughout the study.
- ✚ to keep technical control.
- ✚ to control flexibility.
- ✚ to control Costs and deadlines.

object.:all the associated technical components that correspond to a well identified function



CONSULTATION PHASE

Companies are selected not on price criteria, but on functional criteria.

That means their ability to offer clear and precise information about :

- ✚ **The complete list of all objects' and their components they use**
- ✚ **The expected functions of the objects.**
- ✚ **The ability of the interested companies to integrate the architecturalBus methodology**
- ✚ **The satisfaction of the different users' demands**



Building site PHASE

- ✚ implementation process to industrial implementations.
- ✚ Times necessary for construction reduced by prefabrication in workshop.
- ✚ Test proceedings in workshop before the installation.
- ✚ Strict and pre-established implementation processes

A last minute modification is no longer a major problem



EXPLOITATION AND MAINTENANCE PHASE

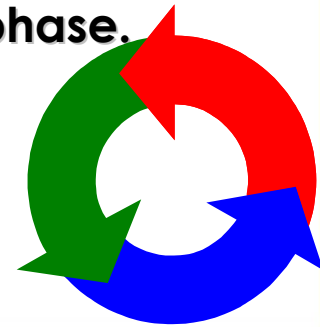
- ✚ Suppression of all complementary tasks caused by transformations , by additional elements.
- ✚ Control of structural elements and networks.
- ✚ Instantaneous help to the users .

I express what I need, I order, I enclic, I connect, it works



DURABLE DEVELOPMENT

- ✚ 100% In-house re-employment of the networks components.
- ✚ All the assemblies are reversible without degradation.
- ✚ Re-employment of 80% of the removable structural equipment.
- ✚ Reduction of waste during the building site phase.



FINANCIAL OPTIMISATION

- ✚ Costs concerning later transformations of the site are 50 to 80% lesser than in traditional Systems.
- ✚ Equal building costs compared to the construction of a traditional building .



ADVANTAGES

conclusion
conclusion

- ✚ Every inner element (wall ,ceiling, Network ,...)is removable without any needs of demolition or deterioration
- ✚ In case of modifications , cost reduction reaches 80 %
- ✚ Thanks to pre-industrialised products clear savings of time are made from the very beginning of the building site
- ✚ Your architect or designer with the help of common software (CAD, financial studies ,technical description) can make use of the ArchitecturalBus data basis where all the objects are at his /her disposal

