Dynamical Behaviour for Buildings

This software determinates the heat flows in a building. It is aimed for design offices, teaching and research organisms.

CoDyBa software permits to estimate the instant heating or cooling powers needed to maintain a given set-point, or to calculate the interior temperatures when the heating or cooling system is insufficient. Humidity is treated in the same way.

Its particularity is that the input entities are those currently utilised by the professionals, while the calculation models are treated in a transparent manner.

Within the interface, each "entity" is associated to a graphical representation, that permits to manipulate it by operations of "copy", "paste", "drag-and-drop" type.

The input screens are accessible by double-click of the mouse.

The basic data are the building geometry and constitution :
- **walls** (with the materials of layers and the surface parameters)
- **windows** (possibility for solar masks)
- **air volumes**

The main parameters are :
- **the climate** : 10 meteorological files for different french towns are supplied
- **internal loads** (heat from lighting, persons, diverse machines)
- **regulators** (powers and set-points for temperature, humidity and ventilation)

Internal loads and regulators can have powers or control parameters as a **time dependent function**.

**Tracing functions** permit to visualise the results or to export them to data processing software.

An **on-line help** with samples is always accessible to guide the user for the input sessions choices.

New functionalities are available in commercial versions : **shading devices** (venetian blinds) with the calculation of the g coefficient as a function of the sun position, **treatment of comfort** (global notation of the a room or of the whole building), **mass flows between rooms**, etc.
**Required hardware**: Windows 95/98/NT/2000/XP, Pentium, 20 Mo RAM, 12 Mo disk

**Base price of the monozone version (1Z)**

Free! Free download on [http://www.jnlog.com/download_en.htm](http://www.jnlog.com/download_en.htm)

**Base price of the multizone version (NZ)**

1 post: 999 euros net of VAT  
2500 euros net of VAT  

**Special price for Department of Education (and training organisms):**

½ * Base price (for a “site” licence only)

These prices include free port and are available till 31/12/2007. No VAT, but for EC (19.6 %). The "site" licence corresponds to an unlimited number of posts on the same workplace.

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**Contact**

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**Partnerships**

The development of CoDyBa was done with some public allocations, but especially by industrial contracts.

Partnerships are required to introduce new capacities of calculation, on the basis of specific, specific or long-term contract.

The French Délégation Générale de l’Armement (DGA), the societies Dupont de Nemours, Lafarge, etc. already withdrew the benefit of a precise, reliable and evolutionary tool, in connection with a qualified development team.

**Current developments**: links with CAD tools, mass flows related to the pressure difference, special glazing, building systems, thermal bridges (see KaLiBat), etc.