

# KALIBAT

## Calculation of linear heat loss coefficient of building thermal bridges

KaLiBat carries out the calculation of linear heat loss coefficients of building thermal bridges.

In geometries 2D, it makes it possible to obtain this coefficient quickly : calculation is done in one to two minutes for slab-on-grade floors, and in approximately ten seconds for other configurations. The manageable cases are very numerous, by combination of the materials and of the dimensions. The calculation rules are in conformity with the European standards EN10211 and EN13370.

The screenshot displays the KaLiBat software interface. The title bar reads "Project - KaLiBat". The menu bar includes "File", "Data", "Display", and "Print".

**Geometry selection:** A dropdown menu is set to "Wall / Wall, Y geometry to exterior".

**Resistances of parts A & B:**

Part	Value	Unit
Part A	2,270	m <sup>2</sup> .°C/W
Part B	2,270	m <sup>2</sup> .°C/W

**Thermal bridge coefficient:** Linear Coeff is 0,77 W/m.°C. A "Calculate" button is present, with a "Result" label pointing to the output field.

**Geometry parameters:** A list of layers with checkboxes, material names, and thicknesses in mm:

Layer	Checked	Material	Thickness (mm)
Int. load-bearing wall	<input checked="" type="checkbox"/>	Aggregate concrete	200
Wall (Part B)	<input checked="" type="checkbox"/>	Aggregate concrete	200
I. I.-b. wall layer 1	<input checked="" type="checkbox"/>	Wall insulation	80
I. I.-b. wall layer 2	<input type="checkbox"/>	Wall insulation	80
I. I.-b. wall layer 3	<input type="checkbox"/>	Wall insulation	80
Wall layer 1	<input checked="" type="checkbox"/>	Wall insulation	80
Wall layer 2	<input type="checkbox"/>	Wall insulation	80
Wall layer 3	<input type="checkbox"/>	Wall insulation	80
Length > 40 cm	<input checked="" type="checkbox"/>		

**Distribution of result:** A cross-section diagram of a wall is shown. The wall is composed of several layers: Interior (16%), Wall insulation, Aggregate concrete, and Exterior. The diagram is labeled "Internal load-bearing wall (Part A)". A "Distribution of result" label points to the diagram, which shows "Interior 16%" and "Interior 84%".

Function key F1 = Help

KaLiBat has a graphic interface allowing an immediate visualization of the geometry, with its data. Its use is similar to that of a calculator.

The software has functionalities of read/write on file and impression of the results.

Possibility of modifying the materials and the surface resistances, of replacing the "interiors" and "exteriors" by various rooms : the combination of all these parameters has the effect that one can treat a very large number of cases.

The analysis of the results shows that the precision of the software is better than 30% for the slab-on-grade floors, better than 12 % for other configurations wall/wall or wall/floor (sometimes 15/20% if presence of a screed).

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**Required hardware:** Windows, 2 Mo RAM, 3 Mo disk

## **Base Prices**

1 post : **250 euros net of VAT** (300 euros TTC for 20 % VAT)

n posts ("site" licence) : sliding scale tariffs, consult us

For education, **the price is 500 euros (net of VAT) for a "site" licence.**

## **Conditions**

These prices include free port. They include the licence itself, and a CD-ROM containing software and the technical documentation.

These prices are available till 31/12/2017. No VAT, but for France (20 %). For the "site" licences (an unlimited number of posts on the same workplace), consult us.

Information and questions : by electronic mail (see contact).

Free version et demonstration available at the address : [http://www.jnlog.com/download\\_en.htm](http://www.jnlog.com/download_en.htm).

## **Adress command to**

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## **Contact**

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## **Demand of demonstration versions of KOZIBU + CODYMUR**

This software forms part of a family of tools of thermal building simulation (KoZiBu for the dynamic thermal analysis of a building, CoDyMur for the dynamic analysis of a wall subjected to varied thermal boundary conditions.

*(Demand to adress by email to Jean NOEL)*

Name :

Office :

Adress :