

08/03/2016

Thermal bridging calculator available online

Complex thermal technology criteria calculated in five steps

In respect of the overall energy efficiency of new buildings, the Approved Document Part L1A and L2A and further BS regulations are becoming more and more stringent in terms of thermal requirements. As a result, thermal bridges are becoming an increasingly sensitive area. To meet the specific needs of architects and energy assessors, from February 2016, Schöck Ltd is launching an internet-based system for real-time calculation of various complex thermal technology criteria at www.psi.schoeck.co.uk. The calculator enables planners to produce substantiated thermal bridge analysis in just a few simple steps. It can be printed out immediately and provides a further free tool from Schöck to support the planner in his work.

Based on the construction details, the new thermal bridge calculator computes two-dimensional heat flows, isothermals, temperature factors, surface temperatures and psi values (ψ values). The calculation results provide architects, structural engineers and building physicists with all the information needed to produce a detailed thermal bridge analysis. The results log contains all relevant properties and notes relating to the building structure.

For example, it reveals whether the building structure is at risk and whether mould and condensation prevention has been adequately considered. If all minimum requirements are met, planners are automatically provided with

proof of compliance with the minimum thermal insulation requirements of Approved Document Part L1A, L2A, BS EN 6946 and BS 5250.

The psi value in five easy steps...

1. Enter the as-is situation of the balcony connection (e.g.; freely projecting, supported, with height offset)
2. Determine the planned wall structure (monolithic wall structure or classic thermal insulation composite system)
3. Specify the structure of the individual components for the wall, floor and balcony slab
4. Select the matching type of Schöck Isokorb and load-bearing capacity, together with the required insulation material thickness
5. Based on the input, the result is calculated and a log produced. A three-minute tutorial explains the use and functions of the program. In addition, information 'help' boxes are built into the program to simplify individual steps and assist with issues such as input box entries.

Always current, no need for updates

Because the simulation program developed in collaboration with Syscon Informatik and Sommer Informatik is internet-based, there is no need for software updates and downloads. Users always work with the latest version. The program runs on any end appliance, irrespective of the operating system.

- Ends -

Press Contact for Schöck Ltd:
Michael Revans Communications
47 Barn Rise, Wembley Park,
HA9 9NH

tel: 020 8904 9733
e: michael.revans1@btinternet.com

Spokesperson for Schöck Group:
Wolfgang Ackenheil
tel: +49 72 23 967 471
e: presse@schoeck.de

Notes to the editor

A leading European supplier

Schöck has grown to become Europe's leading supplier of innovative structural load bearing insulation products. The main product is the Schöck Isokorb a thermal break for various types of cantilever constructions in new buildings and for renovation. Its headquarters are at Baden-Baden in southern Germany and there are subsidiary companies in Great Britain, France, Austria, Switzerland, Italy the Netherlands, Belgium, Poland, Hungary, Russia, Japan, Canada and the USA. Sales teams and partners operate in many other European countries and also Australia and South Korea. Schöck is committed to providing the highest level of technical back up and comprehensive customer service to the construction industry.

Image

[Psi-Calculator.jpg]

The screenshot shows a web browser window displaying the Schöck website. The page is titled "Wärmebrücken-Rechner" (Psi-Calculator). The Schöck logo is in the top left, and navigation links for "Deutschland" and "Deutsch" are in the top right. A sidebar on the left lists five steps: 1. Balkonanschluss, 2. Wandkonstruktion, 3. Bauteilaufbau, 4. Schöck Isokorb, and 5. Bauphysikalische Randbedingungen. The main content area features a central image of the calculator's output, showing a cross-section of a wall with a balcony connection, accompanied by a table of data. Below this, a text block reads "In 5 Schritten zum Ψ -Wert" and describes the tool's benefits. A "Jetzt starten" button is at the bottom. A contact box on the right provides phone, fax, and email information.

Based on the construction details, two-dimensional heat flows, isotherms, surface temperatures and psi-values can be calculated in five easy steps with the new psi-calculator

Image: Schöck Ltd.