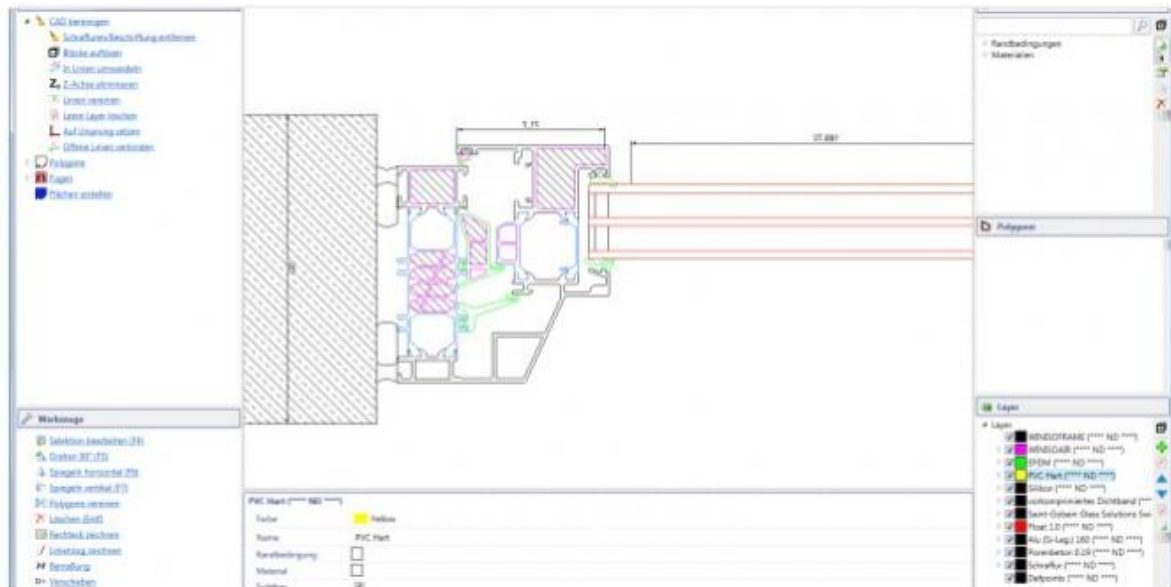


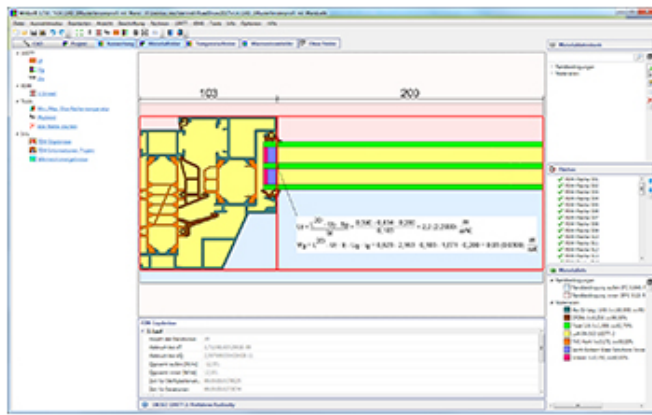
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## SOFTWARE FOR THERMAL CALCULATION OF WINDOWS AND FACADES IS VALIDATED BY IFT ROSENHEIM

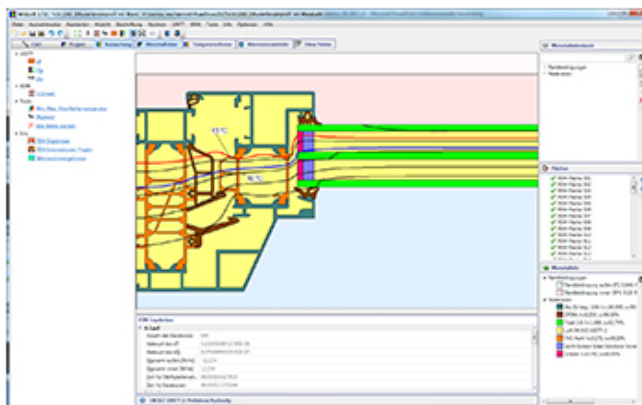
January 22, 2018 | Internet & Software | Comments Off | 246 Views

Nowadays the use of software for the calculation of parameters of heat protection and building physics is indispensable in the house building industry. To meet the growing demands of legislators regarding these programs, the Sommer Informatik GmbH has optimized its proven software solution WinIso<sup>®</sup> according to the new standard DIN EN ISO 10077-2: WinIso<sup>®</sup> is used to calculate two-dimensional heat and vapor diffusion currents, isotherms, U<sub>F</sub>- and Psi-values with a DXF interface – this provides important data to define the thermal insulation properties of frame profiles and to integrate them into the building design. The optimized software was validated at the beginning of November 2017 by the renowned ift Rosenheim.

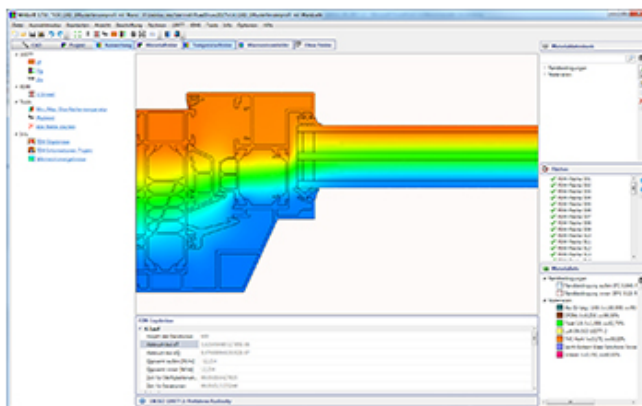


“The revision of the ISO 10077-2 standard for the calculation of building physics values changed the methods of calculation of  $U_F$ -values significantly”, explains Roland Steinert, external technical consultant of the Sommer Informatik GmbH. „In order to meet the requirements of the new standard, the WinIso® software had to be revised accordingly.” The integrated CAD-Editor and the FEM-

calculation in combination with the standard DIN EN ISO 10077-2 enable the user to get a detailed calculation result – especially in the area of ventilated cavities. The method of 2012, which was used before, did not correspond to the latest state of the technology and was also not precise enough in calculating a single equivalent conductance for heat conduction, convection and radiosity for each heat flow direction. “The improved method allows a separate evaluation of radiation heat transfer and convection, which is much more efficient. For heat conduction and convection an equivalent rectangle is evaluated, which is aligned at the used heat flow direction in the profile”, explains Steinert. Additionally, features for a fast and intuitive handling have been added and more editing and calculation capabilities are implemented in the proven software.

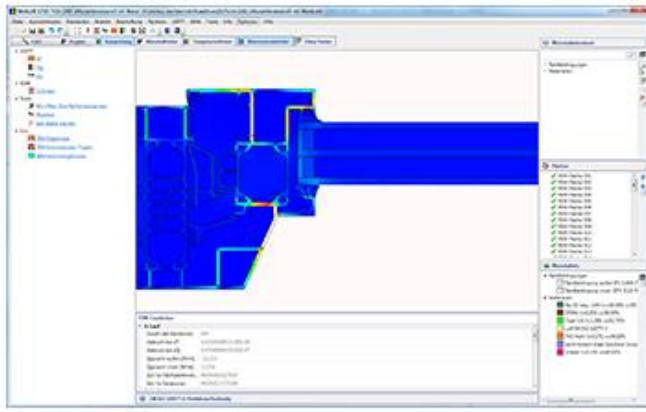


The method of meshing a rectangle, which is known from previous versions, has been replaced by a finite-element triangular meshwork, which now enables the user to map any geometric details in the software. The new version of WinIso® was certified by the ift Rosenheim after almost a year of development and optimization work.



“We have already been working with this test institute for more than 20 years. The previous software version got its validation there, too”, says Steinert. In Europe, the ift is particularly well-known and is regarded as a specialist for assessing the usability of building products. “The certification is done by extremely strict rules, also normatively controlled according to the legal requirements as well as those of ift

Rosenheim”, Steinert explains how the institute is working. Additionally to the public validation, the ift Rosenheim in corporation with Sommer Informatik provides professional trainings contributing to building physics, heat protection, statics and similar topics for customers and employees.



(Further information you can find at: [www.sommer-informatik.de](http://www.sommer-informatik.de))

<http://www.glassnews.co.uk/software-for-thermal-calculation-of-windows-and-facades-is-validated-by-ift-rosenheim/>