

WUFI[®] PRO Heat & Moisture Simulation Workshop
Assess Risk & Prevent Interstitial Condensation

13 & 14 June 2013 - London

Venue: The Human Rights Action Centre, 17 - 25 New Inn Yard, London, EC2A 3EA



Is the building you are designing or retrofitting:

- traditionally built or a protected structure?
- to feature a solid wall or unventilated roof buildup?
- tall or in an area of strong winds?
- damp or considered problematic?
- to be fitted with internal wall insulation?
- to be made very airtight and highly insulated?
- to feature timber in vulnerable positions, like joist ends?

If you are concerned about interstitial condensation, mould or rot then you need to evaluate the risks with WUFI[®] Pro!

This two-day course, **the first of its kind to be held in London**, provides a practical, hands-on introduction to WUFI[®] Pro 'hygrothermal' numerical simulation. It is the world leading simulation software for understanding the risk of interstitial condensation, mould, rot and freeze-thaw in buildings.

Both days of training include **hands-on workshops using the software**, and you will get the **full version of the WUFI[®] Pro software with an 8-week temporary licence**, as well as access to support on the online WUFI[®] Forum for that period.

What can WUFI[®] do for you?

WUFI[®] Pro software allows the realistic simulation of the hourly hygrothermal behaviour of multiple-layered wall and roof systems. It predicts how heat and moisture transfer through the building fabric and what effects can occur when the buildup is exposed to **realistic external and internal climate conditions**. These effects include:

- drying time of construction moisture
- possible condensation problems
- water absorption due to driving rain
- moisture influence on thermal performance
- long-term hygrothermal consequences of retrofit strategies
- even mould growth in the building can be predicted using this model

If you want to ensure that moisture will not build up in your design over time, this software will calculate the contributions from rain, solar radiation, other crucial weather events and internal conditions on an hourly basis, along with the physical properties of specific building materials.

WUFI® Pro is one of only two numerical simulation tools **validated under BS EN 15026**, the standard for hygrothermal numerical simulation software. It has particular relevance for those focused on insulation retrofits of solid wall construction, roof buildups, buildings in exposed conditions and conditions that can stress the building fabric (such as failures or leakage).

In BS 5250(2011), the **Code of Practice for Control of Condensation in Buildings**, it states clearly that the common but old-fashioned 'Glaser' or dew point assessments cannot assess the impact of:

- buildings in 'service conditions' (i.e. real buildings in real locations)
- short-term weather events (like driving rain and freeze thaw)
- air leakage
- hygroscopic materials (like brick, plaster, timber and many insulants)
- orientation
- construction moisture
- material characteristics that vary (depending on changes in moisture or temperature etc.)

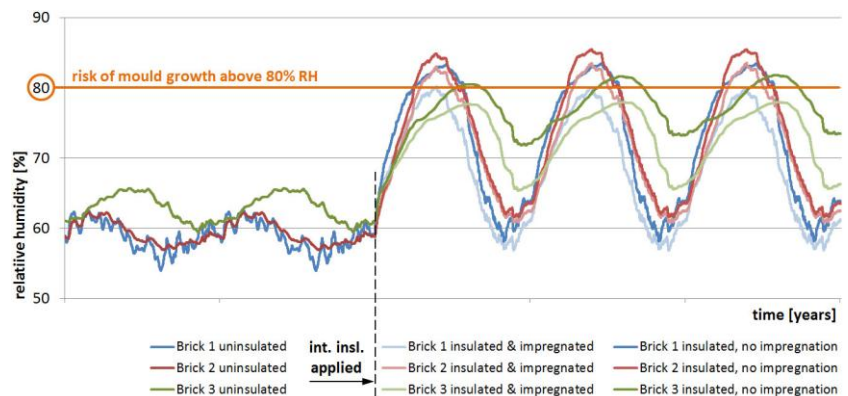
You can assess all these problem conditions with WUFI® Pro.

Topics discussed will include the vocabulary and fundamentals of building physics, practical examples with WUFI® Pro, interpretation of results, the market context for WUFI® in the UK, and a review of completed case studies. Attendees will learn how to input a wall or roof, its orientation and location, and run simulations on different configurations.

Who should attend?

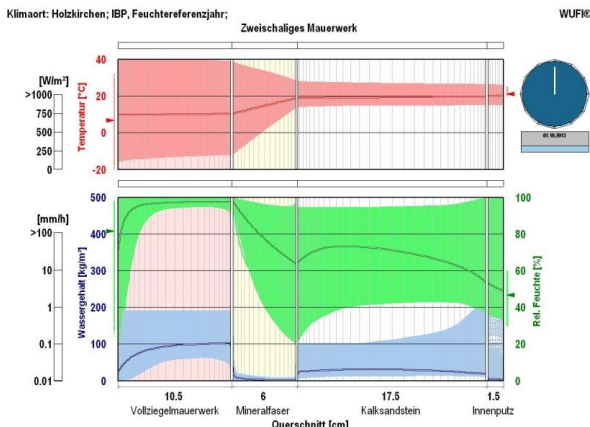
The workshop is open to all building professionals, e.g. architects, engineers, surveyors, insulation suppliers, system manufacturers, builders and anyone with a focus on fabric performance.

No previous experience with the WUFI® Pro software is required.



Conditions at back of built-in timbers in brick wall with IW1 Building Life Consultancy © 2012

There are now thousands of WUFI® Pro users around the world and growing fast but this is the first time this popular WUFI® workshop has been held in London.



Book now to join the growing ranks of WUFI® simulators – take advantage of our early bird offer by booking before 2 May!

How do I book a place?

Online at www.greenregister.org.uk/events.php

Contact: mail@greenregister.org.uk or call us on 0117 377 3490

For full details on costs and registration see page below.

mail@greenregister.org.uk
www.greenregister.org.uk

Trainers

Joseph Little, BArch, MSc Arch. AEES



Joseph Little is the principal of Joseph Little Architects and Building Life Consultancy. He graduated from the UCD School of Architecture in 1996 and from the Graduate School of the Environment at the Centre for Alternative Technology in 2008. Joseph set-up his own practice in 2003 when he realised that his passion for low energy, environmental building design could only be realised outside of mainstream architectural practices and launched Building Life Consultancy in February 2009.

Joseph's consultancy has recently held WUFI® hygrothermal training in Glasgow, Leeds and Dublin with Fraunhofer IBP and thermal bridge training in Dublin. Historic Scotland released 'Technical Paper 15' in Summer 2012 which is a significant report by Little, and colleague Calina Ferraro, on hygrothermal simulation and internal insulation retrofits in Scotland.

Christian Bludau, Dipl.-ing



Christian Bludau is a researcher at the Fraunhofer Institute for Building Physics, Department for Hygrothermics, in Germany. Christian received his Diploma in Civil Engineering at the Technical University of Munich, Germany in 2001. After his studies he worked as research assistant at the Institute for Building Materials and the Institute for Structural Engineering at the University of the German Armed Forces in Munich.

He has worked as researcher at the Fraunhofer Institute for Building Physics since 2005 and from 2011 he has held a lectureship for building physics / moisture control in building at the University of Applied Sciences in Augsburg. His research interests focus on the hygrothermal conditions in wall and roof constructions with special interests in the thermal behaviour of flat roofs. Christian has been involved in many WUFI® seminars, lessons and workshops during the last few years.

The Green Register – Join us

By attending two days of training you become eligible for Green Register membership. Join our ever growing number of building professionals benefiting from membership and boost your organisation's commitment to sustainable construction. Enquire about membership today: call 0117 377 3490 or email mail@greenregister.org.uk.

Cost:

Early bird offer - £600 for Green Register members / £650 for non-members if you book by 2 May 2013.

£650 for Green Register members / £700 for non-members if you book after 2 May 2013.

Course fees include the 2-day course tuition, course materials, light refreshments and lunch on both days, and the full version of the WUFI® Pro software with an 8-week temporary licence, as well as access to support on the online WUFI® Forum for that period.

Registration:

Participants must bring a MS Windows-compatible laptop (on which they have administrator privileges) and will receive the full version of the WUFI® Pro software with an 8-week temporary licence.

For more information and to register, please see www.greenregister.org.uk/events.php contact: mail@greenregister.org.uk or call us on 0117 377 3490.

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