

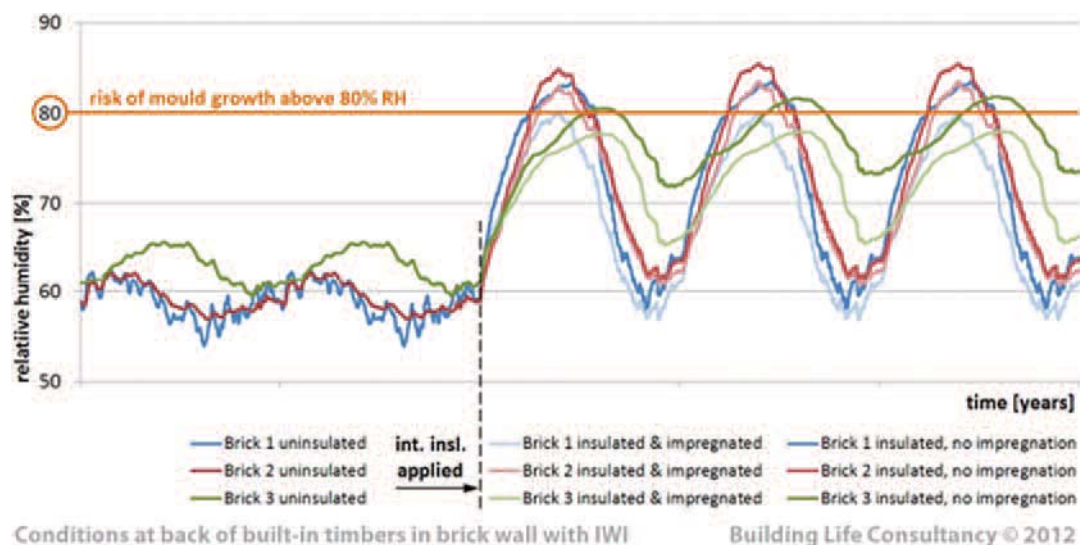
Programme title and code:

CPDEBo1 CPD Certificate in Hygrothermal Risk Assessment for Building Performance

Module context:

Recent revisions to BS 5250(2016) - *Code of practice for control of condensation in buildings*, and the British Standards Institute white paper on moisture in buildings (May and Sanders (2016)) suggest that policy in the UK and Ireland is starting to support a new culture of moisture-focused risk assessment, design and management. There are many ways to lessen risk of moisture damage, one of which is to engage in desktop assessment using software applications. The *Wufi* suite of software applications from Fraunhofer IBP, supported by international standards since 2007, are the world's leading software applications for this purpose.

There is less and less justification, or excuse, for using inappropriate risk assessment methods. It is clear that (a) building design offices would greatly benefit from being able to conduct basic, standards-based, hygrothermal risk evaluation inhouse; and (b) the industry at large would benefit from the availability of dedicated building fabric consultants who can combine on-site building pathology experience with the use of desktop hygrothermal risk assessment tools to provide high quality risk assessment reports.



Module description:

The *CPD Certificate in Hygrothermal Risk Assessment for Building Performance* module enables learners to explore and critique the applied building physics and conventions of hygrothermal calculation and risk evaluation, and their use in creating high quality building fabric performance specifications.

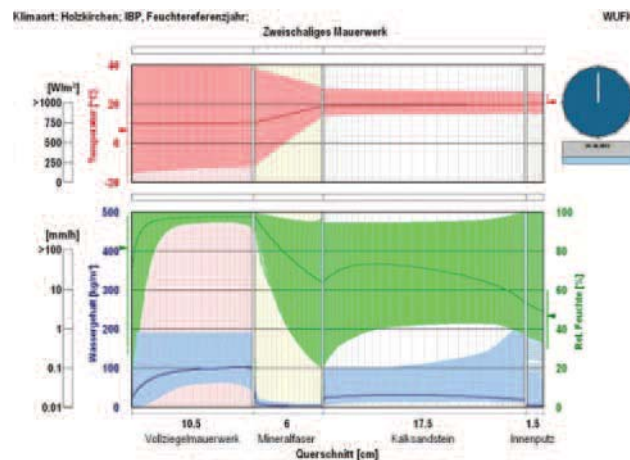
It engages the learner in the analysis and evaluation of the relevant standards and validated software used in the steady state calculation of hygrothermal risk for a limited group of construction components, and the transient numerical simulation of hygrothermal risk for most other construction components.

It enables the learner to differentiate and appraise underlying building physics principles and calculation conventions to specify building construction assemblies which satisfy hygrothermal performance requirements and to conclude when specialist guidance is needed.

Module outcomes:

On Completion of the *Hygrothermal Risk Assessment for Building Performance* module, the learner will be able to:

- Calculate and critique certain hygrothermal risks in a residential building using appropriate steady state software applications.
- Simulate and critique hygrothermal risks in a residential building using appropriate transient numerical software applications.
- Appraise and evaluate applied building physics principles and the main conventions used for hygrothermal risk assessment to support the creation of high quality building fabric performance specifications.
- Summarise and explain to a client on what constitutes low risk NZEB construction and determine when risks associated with hygrothermal performance may be adequately assessed by a design practitioner and when a specialist is required.



Features:

- This is a distance learning programme, delivered using cloud-based online technologies.
- All students are trained in the use of online technologies and tools as part of induction.
- All lectures are pre-recorded.
- Feedback webinars take place every second week and are recorded to enable repeat viewing.
- The module sits with the MSc in Building Performance (Energy Efficiency in Design) which includes nested postgraduate certificate and diploma elements.
- Participants will be provided with a student licence of the (full) *Wufi Pro* software application for a semester.

Professional CPD:

The module comprises 100 learning hours and will be recognised for two years of professional membership CPD.

The module is open to professionally qualified architects, engineers, building surveyors and architectural technologists.

Programme fee:
€600

Applications:
Online application form on
<http://dit.ie/architecture/>

Location:
All contact is online.

Commencement:
Start date to be advised.

CPD duration:
The module is delivered over four weeks with a project in fifth week.

Further information:
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