

# One-day BuildDesk U-value calculation & software training course

- 10:00 Introduction**  
Influence of U-values on building performance  
Current Building Regulations Part L (2013) requirements for U-values
- 10:30 Thermal properties an introduction**  
Heat transfer mechanisms  
Convection, conduction & radiation  
U-values & thermal conductivities of materials
- 11:00 Thermal transmittance calculations**  
Numerical methods  
Simplified methods to BS EN ISO 6946 (2007)  
Thermal Bridging  
BR 443 (2006) Conventions for U-value calculations  
Common sources of errors in calculations
- 11:15 BuildDesk U 3.4 software overview**
- 11:30 Calculating U-values for external walls**  
Masonry construction  
Cavity air layers & emissivity  
Mortar bridging & fixings  
Inhomogeneous layers e.g. Plasterboard on dabs
- 12:30 Lunch**
- 13:00 Calculating U-values for external walls -cont**  
Timber frame & lightweight steel frame  
Rainscreen cladding
- 13:30 Calculating U-values for roofs**  
Cold pitched roofs  
Warm pitched roofs  
Flat roofs
- 14:00 Calculating U-value for floors**  
Calculation procedures –BS EN ISO 13370 (2007)  
Slab on ground floor  
Suspended floors
- 14:30 Basement walls & floors**
- 15:00 Unheated spaces**
- 15:15 Condensation risk analysis** to BS EN ISO 13788 (2012)  
Surface & interstitial condensation risk  
Vapour resistances and  $\mu$ -values
- 15:45 Software results and reports**
- 16.15 Heat capacity/kappa value (K) & Thermal mass calculations**
- 16:30 BBA U-value competency scheme**
- 16:45 Q&A**

*CPD Certificates will be issued by email to delegates after completion of the course*