



U6 – Building Physics and Sustainability

Objectives: <ul style="list-style-type: none"> energy performance declaration & programmes discern between energy declaration, end-energy use, primary energy use alternative programmes like PHPP to calculate energy use more accurate and design in passive house or near zero energy standard and design houses also with better indoor climate (summer, ventilation, technical overheads, primary energy) Methods: <ul style="list-style-type: none"> lectures, exercises, workshop 		Trainer:
Place: lecture workshop Duration: 3 hours Equipment laptops beamer flip-chart prepared examples		
Theory	lectures, examples, charts, presentations ...	Documents: Info sheet I7 energy performance & programs (i.e. ENEV, Energieausweis) Text sheet X1 European Energy Code (building performance 2020) X2 European Building Performance Declaration X3 ENEV X4 PHPP X5 klima:aktiv Haus X6 Minergy (CH) Slide Show: Overview Building Physics
Practice	Task <ul style="list-style-type: none"> working groups with 3–4 participants working on detail examples calculate u-values including “Glaser” with programs (www.u-wert.com) checking and understanding energy performance declarations see and understand a PHPP calculation example preferably compared with energy performance certificate of the same building finding freeware for EBDP find your national regulations and compare with EU 2020 energy performance goals for buildings what is still missing in that goals? 	
Organisation prepare workspace for participants with enough places, WiFi / w-lan, copy text-sheets for multiple choice tests or have them online (e-learning) prepare examples of details to work with in groups plus discussion		