



Training Course Program

BUILDINGS ENVELOPES AND THEIR ROLE IN SAVING ENERGY

Third Day:

10:00 AM: 12:00 AM

Studying the physical and optical properties of glass

- Optical properties
- Instrumental assessment of optical properties
- Solar heat gain coefficient calculations
- Highly efficient glass produced from recycled materials
- Solar reflection coefficient
- Exploring the Physical and optical properties reports

Dr. Mohamed Mahmoud

12:30 PM: 2:30 PM

Evaluating the building façade performance

- Air leakage
- Water penetration
- Structural Performance
- Comparison between standard test methods
- Acceptance and rejection criteria

Dr. Mahmoud Mokhtar

Dr. Mohamed Morsy



Fouth Day:

10:00 AM: 12:00 AM

Building envelope

- Building envelope definition
- weathering data file
- climate regions.
- Building envelopment requirements
- Building envelopment opaque parts
- Physical properties of building envelopment
- Thermal conductivity coefficient calculations and measurements
- Thermal resistance estimation methods
- Façade openings and shading calculations

Dr. Mahmoud Abd El-Razik

Labs. visit

- Optical properties tests of glass
- Leakage and penetration tests of widows
- Thermal conductivity test.