

WORKSHOP NO. 1

ASSESS AN AFFORDABLE HOUSING PROJECT

Duration: 25 min

- Create a user account in the EDGE App and log in.
- Create the case study as per the next slide.
- Ensure that the project meets:
 - The EDGE Energy section requirements.
 - The EDGE Water section requirements.
 - The EDGE Materials section requirements
- Share your results, for group discussion.
- Share your project with a friend.

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A new build affordable housing project in Nairobi comprising of 100 identical separate houses. Each house is a 2 bedroom, 2 floor unit, 50m² area. There is no heating or cooling.



Energy efficiency:

Uses 15% WWR

Horizontal external shading devices for the south orientation (window overhang depth equals window height). Window area is 2m².

LED lights for internal and external areas.

Solar hot water heating (50% of electricity generation)

Water efficiency:

Efficient showerheads with 8 L/min.

Dual flush WCs with 6/3 L/flush.

Efficient WHB taps – 5L/min

Kitchen taps – 5L/min

Materials efficiency:

150 mm reinforced concrete floor and roof slabs.

Masonry stone blocks with 150mm internal walls and 200mm external walls.

Ceramic Tiled flooring

Steel window frames.