

Pilot project <Algeria>

**Design and construction of a rural pilot house with
energy efficiency**

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•Introduction

- The purpose of the building is to:
 - Build a rural pilot house with energy efficiency in the frame of the government program (1.200.000 houses, 450.000 rural houses)
 - Location: Algiers
 - Type of building: Residential
 - Specification: 1 unit
 - New construction
 - Using Stabilized Earth Concrete



The earth stabilized blocs

- Mixture of earth and a weak ratio of cement (5%)
- High thermal and acoustic quality
- Economic (no energy consumption for extraction, using the foundation soil,....)



The main energy concept of the pilot project is:

- use of local construction materials,
 - optimum thermal insulation of the house,
 - adequate orientation of the windows,
- use of natural light,
- use of low energy consumption bulbs,
- use of solar energy to generate hot water.
 - winter heating through the floor.
 - summer shading
 - double glazed windows

• Status of the project and photos

- Design phase has been completed
- Device for producing Earth Stabilized Blocs obtained
- Embankment works completed in June 2007
- Laying of foundations has started

