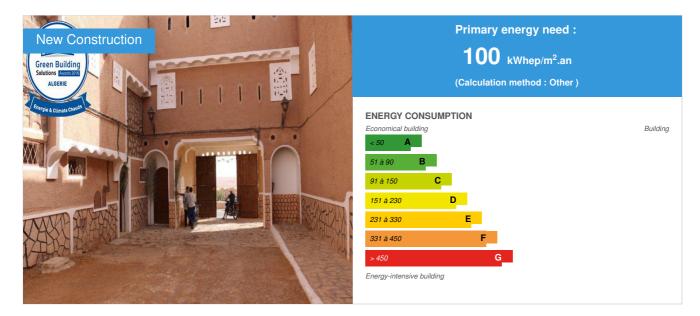
# CONSTRUCTION21

# House Type Ksar Tafillelt

by abderrahmane zidane / 🕦 2016-05-15 11:47:37 / Algérie / 💿 20763 / 🍽 FR



 Building Type : Collective housing > 50m

 Construction Year : 2010

 Delivery year : 2014

 Address 1 - street : Ksar tafilelt 47131 TAFILELTE - GHARDAIA , Algérie

 Climate zone : [BWh] Subtropical dry arid

Net Floor Area : 180 m<sup>2</sup> Construction/refurbishment cost : 9 000 000 € Number of Dwelling : 1 080 Dwelling Cost/m2 : 50000 €/m<sup>2</sup>

#### General information

A home that makes up the new Ksar Tafilelt has Ghardaia, located at the entrance of the city, it serves as a bed house. Made of local materials extracted on site, stone, lime and plaster. It is part of a set of 1,000 social housing for vulnerable social groups. The approach is primarily social and environmentale

## Data reliability

Self-declared

Stakeholders

#### Stakeholders

Function : Contractor FONDATION AMIDOULE http://www.tafilelt.com/

#### Contracting method

Off-plan

#### Owner approach of sustainability

local materials: stone, lime and plaster available on site. Local labor and voluntary approach. public housing

#### Architectural description

Inspiration of the local architecture of Saharan type  $\ensuremath{\fbox{C}}^{\bullet}\ensuremath{\mathsf{A}}$ 

#### If you had to do it again?

An expansion project is planned in the area

#### Building users opinion

totally satisfied

#### Energy

#### **Energy consumption**

Primary energy need : 100,00 kWhep/m<sup>2</sup>.an Primary energy need for standard building : 350,00 kWhep/m<sup>2</sup>.an Calculation method : Other Final Energy : 50,00 kWhef/m<sup>2</sup>.an Breakdown for energy consumption : 80% of the energy for the lighting has comes from solar energy PV More information : The energy audit of this housing is being developed

## Envelope performance

Envelope U-Value : 1,00 W.m<sup>-2</sup>.K<sup>-1</sup> More information : Very high thermal inertia of the envellope

#### Renewables & systems

#### **Systems**

- Heating system :
  - Gas boiler

#### Hot water system :

Gas boiler

Cooling system :

Fan coil

#### Ventilation system :

- Natural ventilation
- Nocturnal ventilation
- Nocturnal Over ventilation

Renewable energy production : 50,00 %

#### Environment

#### **GHG** emissions

GHG in use : 50,00 KgCO<sub>2</sub>/m<sup>2</sup>/an Methodology used : other GHG before use : 1 000,00 KgCO<sub>2</sub> /m<sup>2</sup> Building lifetime : 100,00 an(s) , ie xx in use years : 20

#### Life Cycle Analysis

Eco-design material : Lime plaster Stone

#### Products

#### Product

local stone

LOCAL

LOCAL

#### Attp://tafilelt.com/site/

Product category : Structural work / Structure - Masonry - Facade LOCAL STONES

SC

## Plaster

naturel

Product category : Structural work / Structure - Masonry - Facade The gypsum ghardaia is one of the most used local materials in the regions

/

#### Costs

#### Construction and exploitation costs

Global cost :  $12\ 000,00 \in$ Reference global cost :  $12\ 000,00 \in$ Global cost/Dwelling : 11.11Reference global cost/Dwelling : 12000Cost of studies :  $1 \in$ Total cost of the building :  $9\ 000 \in$ Subsidies :  $7\ 000 \in$ 

# Energy bill

Forecasted energy bill/year : 150,00 € Real energy cost/m2 : 0.83 Real energy cost/Dwelling : 0.14



#### Urban environment

INTEGRATED IN KSAR

#### Building Environnemental Quality

#### **Building Environmental Quality**

- Building flexibility
- indoor air quality and health
- biodiversity
- works (including waste management)
- consultation cooperation
- acoustics
- comfort (visual, olfactive, thermal)
- waste management (related to activity)
- water management
- energy efficiency
- renewable energies
- integration in the land
- building process
- products and materials

#### Contest

#### Reasons for participating in the competition(s)

# Building candidate in the category



+

\_











Date Export : 20230504171723