


## House Type Ksar Tafillelt

by abderrahmane zidane / 2016-05-15 11:47:37 / Algérie / 20678 / FR



**Primary energy need :**

**100** kWh<sub>ep</sub>/m<sup>2</sup>.an

(Calculation method : Other )

**ENERGY CONSUMPTION**

*Economical building* *Building*

< 50	<b>A</b>
51 à 90	<b>B</b>
91 à 150	<b>C</b>
151 à 230	<b>D</b>
231 à 330	<b>E</b>
331 à 450	<b>F</b>
> 450	<b>G</b>

*Energy-intensive building*

**Building Type** : Collective housing > 50m  
**Construction Year** : 2010  
**Delivery year** : 2014  
**Address 1 - street** : Ksar tafillelt 47131 TAFILELTE - GHARDAIA , Algérie  
**Climate zone** : [BWh] Subtropical dry arid

**Net Floor Area** : 180 m<sup>2</sup> Autre type de surface nette  
**Construction/refurbishment cost** : 9 000 000 €  
**Cost/m2** : 50000 €/m<sup>2</sup>

### General information

A home that makes up the new Ksar Tafillelt has Gharadaia, 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 environnementale

### Data reliability

Self-declared

### Stakeholders

#### Stakeholders

**Function** : Contractor  
 FONDATION AMIDOULE  
 Mr AMARA MOUSSA

## 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

[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 kWh<sub>ep</sub>/m<sup>2</sup>.an

Primary energy need for standard building : 350,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Calculation method : Other

Final Energy : 50,00 kWh<sub>ef</sub>/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 envelope

## 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 systems :

- Solar photovoltaic

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

[↗](#) Tout les matriaux sont extrait sur site localement

## Products

### Product

local stone

LOCAL

LOCAL

[↗](http://tafilelt.com/site/) <http://tafilelt.com/site/>

Product category : Gros œuvre / Structure, maçonnerie, façade

LOCAL STONES

SC



Plaster

naturel

Product category : Gros œuvre / Structure, maçonnerie, façade

The gypsum ghardaia is one of the most used local materials in the regions

/

## Costs

### Construction and exploitation costs

Global cost : 12 000,00 €

Reference global cost : 12 000,00 €

Global cost/Dwelling : 11.11

Reference global cost/Dwelling : 12000

Cost of studies : 1 €

Total cost of the building : 9 000 €

Subsidies : 7 000 €

### Energy bill

Forecasted energy bill/year : 150,00 €

Real energy cost/m<sup>2</sup> : 0.83

Real energy cost/Dwelling : 0.14

## Urban environment

INTEGRATED IN KSAR

## Building Environmental 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

### Building candidate in the category



Energie & Climats Chauds



Coup de Coeur des Internautes



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