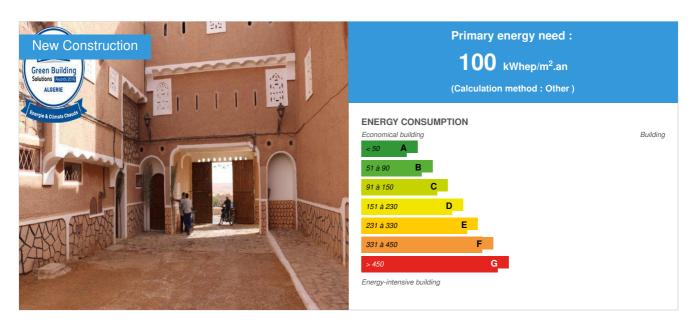


House Type Ksar Tafillelt

by abderrahmane zidane / (1) 2016-05-15 11:47:37 / Algérie / ⊚ 21053 / ► 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 : $180 \ m^2$

Construction/refurbishment cost : 9 000 000 €

Number of Dwelling: 1 080 Dwelling

Cost/m2: 50000 €/m²

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 envirronementale

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

☑ 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/m².an

Primary energy need for standard building : 350,00 kWhep/m².an

Calculation method: Other
Final Energy: 50,00 kWhef/m².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⁻².K⁻¹

 $More\ information:$

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 systems :

Renewable energy production: 50,00 %

Environment

GHG emissions

GHG in use: 50,00 KgCO₂/m²/an Methodology used: other

GHG before use: 1 000,00 KgCO₂ /m² 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

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/m2: 0.83
Real energy cost/Dwelling: 0.14

Urban environment

INTEGRATED IN KSAR

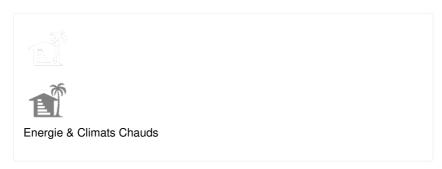
Building Environnemental Quality

Building Environmental Quality

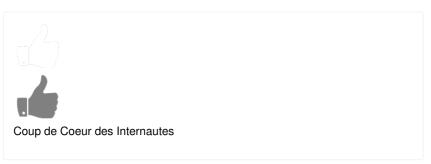
- Building flexibility
- indoor air quality and health
- biodiversity
- works (including waste management)
- consultation cooperation
- acoustics
- comfort (visual, olfactive, thermal)
- waste management (related to activity)
- water management
- · energy efficiency
- renewable energies
- integration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

Contest

Building candidate in the category









Date Export : 20230705172008