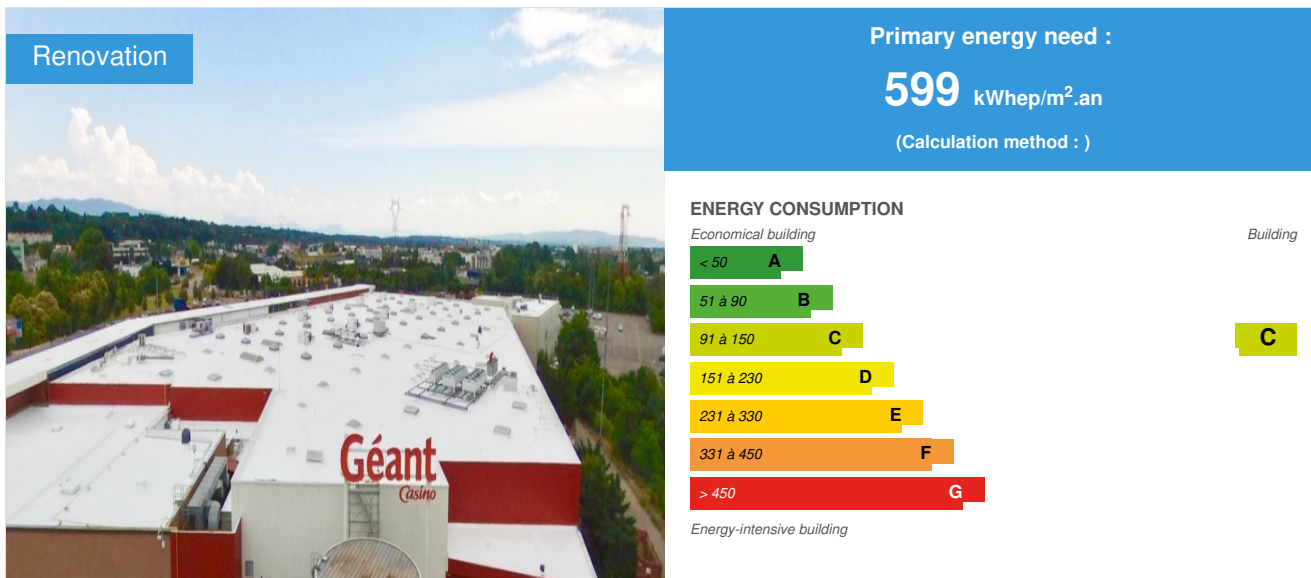


Géant Casino in the south of Valence

by Antoine Horellou / 2019-05-29 10:53:38 / Francia / 6990 / FR



Building Type : Supermarket - Hypermarket

Construction Year : 2018

Delivery year : 2018

Address 1 - street : Avenue de Provence Quartier, Rue de Chantecouriol 26000 VALENCE, France

Climate zone : [Cbc] Mild, dry winter, warm and wet summer.

Net Floor Area : 18 000 m²

Construction/refurbishment cost : 360 000 €

Number of Visitor : 18 000 Visitor

Cost/m² : 20 €/m²

General information

Installation on May 30, 2018 of a weather station, surface temperature sensors and soffit.

Description of the operation: A coating Cool Roof France was implemented on 18 000 m² of roof of the hypermarket and the gallery of the Casino Valence Sud to reduce the energy expenditure of the building.

Results:

- The surface temperature is reduced by 4.98 °C on average with reduced maximums of 36 °C
- Maintaining temperature setpoints despite 5 roof top (out of 10) down
- The overall energy consumption of the building has been reduced by 12% or 20.5kWh / m² / year

Sustainable development approach of the project owner

This approach responds to the fact that Géant Casino Valence Sud wanted to lower its energy consumption.

Architectural description

The building is a shopping center of 18,000m². The roof, is sandwich panel steel tank / insulation / bilayer bitumen and suffering from microcracks. In 2017, the decision was made to implement a CoolRoof application on the roof.

Photo credit

Coolroof

Stakeholders

Contractor

Name : Groupe Casino

Contact : 04 75 75 42 00

<https://magasins.geantcasino.fr/magasin/valence-sud/CG859>

Construction Manager

Name : Cool Roof France

Contact : 02 44 84 08 04

<https://www.coolroof-france.com/>

Stakeholders

Function :

Cool Roof France

02 44 84 08 04

<https://www.coolroof-france.com/>

Energy

Energy consumption

Primary energy need : 599,00 kWh_{ep}/m².an

Primary energy need for standard building : 300,00 kWh_{ep}/m².an

Calculation method :

CEEB : -0.0008

Initial consumption : 599,00 kWh_{ep}/m².an

Real final energy consumption

Final Energy : 565,00 kWh_{ef}/m².an

Renewables & systems

Systems

Heating system :

- Heat pump

Hot water system :

- Individual electric boiler

Cooling system :

- Reversible heat pump

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- No renewable energy systems

Environment

Urban environment

Valencia Business Center 2

Products

Product

CoolRoof

Cool Roof France

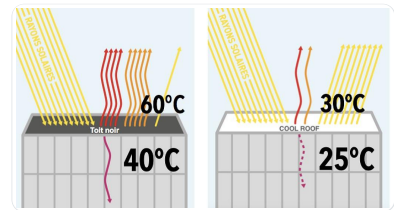
contact@coolroof-france.com

<https://www.coolroof-france.com/>

Product category : Table 'c21_spain.innov_category' doesn't exist SELECT one.innov_category AS current,two.innov_category AS parentFROM innov_category AS oneINNER JOIN innov_category AS two ON one.parent_id = two.idWHERE one.state=1AND one.id = '12'

Cool Roof offers an innovative ecological reflective thermal paint, which reflects the heat. Environmentally friendly, it is light, resistant and easily applied to all types of roofs. A white roof "Cool Roof" returns the heat of the sun, thus limiting the heat on the roof of the building, and thus inside the building. The building manager can: - save up to 30% energy - plug the roof microcracks - all without having to modify the structure of his building

Owners of large commercial, industrial or institutional buildings seek this kind of simple, affordable, direct energy efficiency solution, thus avoiding overloading the production of cold.



Costs

Construction and exploitation costs

Total cost of the building : 327 800 €

Energy bill

Forecasted energy bill/year : 272 000,00 €

Real energy cost/m2 : 15.11

Real energy cost/Visitor : 15.11

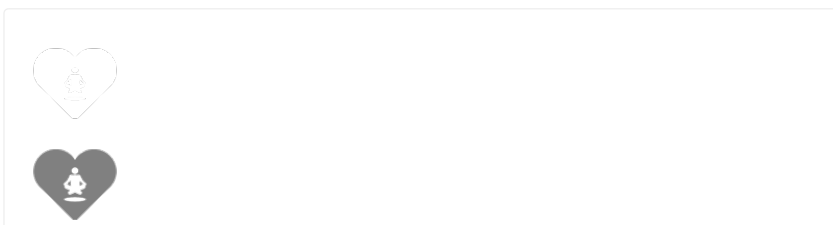
Contest

Reasons for participating in the competition(s)

In 3 weeks of work without hindering the smooth running of the store, the Géant Casino hypermarket in the south of Valence has thus recorded up to 36 ° C less during the peaks of heat on the roof after application of the CoolRoof, a decrease of 12% on the overall energy bill in summer.

The hypermarket has therefore achieved energy savings and therefore carbon savings thanks to the reduction in air-conditioning consumption. The interior and exterior comfort of the building is also improved since the building does not suffer any more from hot weather, the internal temperature felt is reduced and the heat island effect around the building is also controlled.

Building candidate in the category



Santé & Confort



Prix du public



Prix des Etudiants



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