


# VENTILATED FACADE

Formula to calculate  
**CO2 emissions of your project  
in albamiel stone**



CO2  emissions

$$M2 \cdot (8.24 + (kmc \cdot 0,014) + (kmb \cdot 0,002))$$

kg of CO2  
absorbed per  the arboreal  
community proposed

**5.160**

And  
our proposal  
**to compensate them**



Tree communities  
to be planted to ensure  
that your **ALBAMIEL**  
building is **0 carbon**

**m2** are the square meters of stone  
you need for your façade

**8.2437 Kg** of CO2 emitted = (2.4 production  
+ 2.29 placement + 0.0037 maintenance  
+ 3.55 deconstruction) per m2\*

**kmc** are the Km by road from the production  
site to the site (each m2 of simple brick  
wall emits 0.014 Kg of CO2 per km  
traveled on the road\*)

**kmb** are the Km by boat from the production  
site to the site (Each m2 of simple brick  
wall emits 0.002 Kg of CO2 per km  
traveled by boat\*\*)

The proposed Mediterranean  
tree community

			kg CO2 absorbed***
1 Aleppo pine		>	1.800
1 Stone pine		>	1.845
1 Holm oak		>	1.875

**The calculated CO2 emissions include extraction and processing, placement, its maintenance for 100 years** (estimated life of the house), **and its future deconstruction including transport** within 50 km, either to be reused in a new one or to be returned to the earth.

\*ALBAMIEL stone FDES report based calculations  
\*\* transport calculator edited by the CTMNC

\*\*\* data calculated from the study 'Natural CO2 sinks' study by Professor Manuel Enrique Figueroa Clemente (Seville University).  
We consider half absorption of an adult specimen multiplied by its life expectancy.