


MASSIVE STONE CONSTRUCTION

Formula to calculate
CO2 emissions of your project
in albamiel stone



CO2  emissions

$$M2*(21,42 + (kmc*0,04) + (kmb*0,05))$$

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**

stone square metres you need
for your building site
21,42 Kg de CO2 emitted per m2*
(**7,2** production + **3,62** placement
+ **0,0037** maintenance
+ **10,60** deconstrucción)
kmc are the road kilometres from the production
site to the construction site (each m2 emits 0.04 kg
of CO2 per km travelled on the road*)
kmb are Km by boat from the production site to
the construction site (each m2 emits 0.005 kg
CO2 per km travelled by ship*)

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.

DOUBLE LEAF MASSIVE STONE WALL

Formula to calculate
CO2 emissions of your project
in albamiel stone



CO2 emissions

$m2_{ex} * (21,42 + (kmc * 0.04) + (kmb * 0.005))$
 $+ m2_{int} * (8.24 + (kmc * 0.014) + (kmb * 0.002))$

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**

m2ex are square meters of exterior stone walls you need for your project
21.42 kg of CO2 emitted per m2* (**7.2** production + **3.62** installation + **0.0037** maintenance + **10,60** deconstruction)
m2int 8.2437 Kg of CO2 emitted per m2* (2.4 in production + 2.29 installation + 0.0037 maintenance + 3.55 deconstruction)
kmc is the km traveled on the road between the production site and the construction site (each m2 of exterior wall emits 0.04 kg of CO2 per km traveled on the road and 0.014 per m2 of interior wall*)
kmb is the boat mileage from the production site to the construction site (each m2 of exterior wall emits 0.005 kg of CO2 per km traveled by boat and 0.002 per m2 of interior wall**)

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.

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