



# ENVIRONMENT

Line: **CERAMIC TILE** (Bogotá)  
Efficient use of resources



## ENVIRONMENTAL DATA SHEET

**Manufacturer:**

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We care about our planet, taking into consideration the current environmental problems. We operate under a sustainability strategy, which guarantees a balance between economic growths, reduction of environmental impact and social welfare.

Our ceramic tiles have superior resistance conditions to the established standards.

Product	Format cm x cm	Thickness mm	Absorption Group	Flexural Strength	Impact Resistance Vs Normal	Abrasion Resistance	Cracking Resistance	Acids and Alkaline Resistance	Stain Resistance (Min. class 3)
Ceramic	30 x 20	6,9	BIIB	115%	128%	NA WALL	Resistant	Resistant GLA* GA*	Class 5
Ceramic	30 X 45	8,4	BIIB	121%	143%	The products evaluated are found within the established IEP by the manufacturer			
Ceramic	30 X 30	7,2	BIIB	139%	147%				
Ceramic	30 X 60	9,5	BIIB	161%	152%				
Ceramic	45 X 45	8,5	BIIB	106%	133%				

RESISTANCE TO FLEXION Test method ISO 10545 ISO 13006 specifications

RESISTANCE TO IMPACT Test method ISO 10545 ISO 13006 specifications

RESISTANCE TO SUPERFICIAL ABRASION AND DEEP ABRASION STANDARD ISO 10545-6 10545-7 ISO 13006 Specifications

RESISTANCE TO FOURTH NORM ISO 10545-11 ISO 13006 Specifications

RESISTANCE TO CHEMICAL ATTACK NORM ISO 10545-13 ISO 13006 Specifications

STAIN RESISTANCE STANDARD ISO 10545-14 Minimum class 3 ISO 13006 specifications

\* GA: No visible effects (NTC 4321-13 TEST METHOD TO DETERMINE CHEMICAL RESISTANCE).

\* GLA: No visible effects (NTC 4321-13 TEST METHOD TO DETERMINE CHEMICAL RESISTANCE).

Durable materials are more environmentally attractive, since by not having to be replaced frequently they allow the reduction of operating costs and environmental impact.

Variation in the consumption of non-renewable resources for the manufacture of ceramics 2016 vs 2014

Product	Format cm x cm	Thickness mm	Absorption Group	Raw Material Variation
Cerámica	30 x 20	6,9	BIIB	-2%
Cerámica	30 X 45	8,4	BIIB	-10%
Cerámica	30 X 30	7,2	BIIB	3%
Cerámica	30 X 60	9,5	BIIB	-9%
Cerámica	45 X 45	8,5	BIIB	-3%

Our ceramics can be recycled or disposed as inert construction waste, allowing to reduce the environmental impact.

We have continuously improve our processes of manufacture, thus reducing the use of non renewable resources.



**SUTAINABLE PPODUCTION**

In our constant fight against climate change, we continue to innovate and make our manufacturing processes more enviromantally sustainable, to provide your projects with ceramic tiles with low embedded energy and with a reduced water footprint.

Energy Savings in the Ceramic Manufacturing process 2016 vs 2014

30% Water consumption savings

7% Energy consumption savings

3% Thermal Energy Savings



Our manufacturing process reuses 53% of recovered water and do not generate liquid waste. 100% of the non-used finished product is recycled and reused again.

In the manufacture of our ceramic tiles we consume 0.13 liters of drinking water, 0.37 KWh of electricity and 3,32MJ of thermal energy per kilogram.



**SOCIAL RESPONSIBILITY**

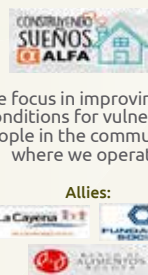
We design and build well-being for society, renewing the lives of people through inspirational spaces.



**Education**



**Habitability**



**Shared Valued Initiatives + employment inclusion and Economic strengthening**





**HEAT ISLAND EFFECT**

The exterior use of our ceramic tiles can help reduce the increase in the air temperature and its negative impact on microclimates, thanks to the high solar reflectance properties the ceramic has.



Product	Heat transfer coefficient (W/(m2K))	SRI	Source
Ceramic Stone	5(low wind speed)	62	Report N° C162917 ITC
	12(media wind speed)	66	
	30(high wind speed)	68	
Ceramic cream	5(Low wind speed)	75	Report N° C162918 ITC
	12(media wind speed)	77	
	30(high wind speed)	79	
Ceramic Ash	5(Low wind speed)	46	Report N° C162916 ITC
	12(media wind speed)	49	
	30(high wind speed)	52	

*\*Solar refractive index (SRI)*