



tourist and landscape signage - heritage interpretation - orientation tables

lava

Everything you need to know about
enameled lava



Enamelled lava

A little history

Lava stone has been used for roadside signage for over a century. Michelin plaques were to be found throughout towns and villages from the end of the First World War onwards. Some milestones and many signposts and street signs can still be seen today and are still in good condition.

The Touring club de France also had many enamelled lava orientation tables made as early as 1908.



Ios (Greece).

Lava stone



Lava is a natural and local product. It is excavated from quarries in Volvic (France) and called "eternal stone".

Weight: 55 kg per m² at a thickness of 25mm. Density: 2.2.

Aesthetic qualities

Signage made from lava is unequalled in quality. The technique that uses transparent enamels gives great depth of colour, and an incomparable finish highlighted by the natural shine of enamelled stone.

Technical qualities

This stone is unaffected by the climate, UV rays, pollution, or corrosion caused by sea air or sand. It withstands acids, solvents, scratching, and all ill treatment. Graffiti is easily removed with a standard solvent. Its hardness is to be situated somewhere between marble and granite.

Life expectancy

The life expectancy of lava stone is unequalled on the market. Empreinte guarantees its products will look as good as when they are first delivered for 10 years.



The "handcrafted" look

Every lava product produced in our workshops is unique. It is personally supervised by one of our craftsmen, who'll do his best to give you quality beyond reproach. Empreinte's know-how is very specific and exactly the opposite to mass-produced industrial products.

Adaptability

One or several colours, decorative features in four-colour process and a variety of shapes; all sorts of tourist signage are possible.

Enamelled lava stone is ideal for the description and interpretation of natural or historic heritage and for orientation tables.

Enamels



Enamels are mainly made of iron oxides and their derivatives, ground to a powder. This powder base is mixed with water and applied onto the stone. They come in a great variety of colours. Base colours are sprayed on. The decorative features are created according to a serigraphic-type process. Inorganic paint guarantees that the work will be totally unaffected by UV rays. Vitrification is achieved by three separate batches of firing at approximately 1,000°C.



Enamelled lava

Respect for colours



Despite all the care deployed during production, we cannot guarantee that the shades of colour you require will be perfectly respected.

The (very few) variations are caused as much by the manual enamelling process as by the density of the stone or the colours available from enamel suppliers.

However, Empreinte will carry out all the necessary colour tests to obtain a final result that's as close as possible to your specific requirements.

Glazing

Glazing (surface crazing) is natural and inevitable.

It stems from the differences in dilation between the enamel and stone during firing. It won't affect the permanence of the plaques and it's what gives enamelled lava its natural "handcrafted" aspect.



Fastening items to their base



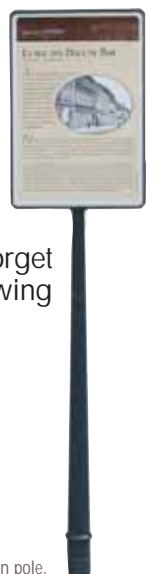
Plaques can be glued with outdoor tiling glue or through a chemical sealing process. They can also be fastened by bolts on the underside.

In any case, the base must be perfectly flat. Don't forget that table type bases will need to be very rigid, owing to the weight of the plaques of lava.

Reminder:

Weight 55 kg/m² with thickness of 25 mm.

Made of lava fastened onto railing.
North of France, visuals features A. Lagny.



Fastened to a cast iron pole.



Enamelled lava

Resistance to stress and maintenance



Lava withstands all forms of climatic stress, even the harshest.
Created here for the Pic du Midi de Bigorre France, altitude 2,877m.

Staying power of colours

Totally unaffected by bad weather, UV rays, corrosion (salt or sandstorms)

Scratching and boring

Perfectly resistant to scratching with keys or equivalent, without consequence on decorative features

Impact resistance

Excellent

Graffiti

All graffiti can be very easily removed : the enamel withstands all solvents and acids on the market.

Stress resistance

Totally resistant to heat, cold and pollution

Maintenance

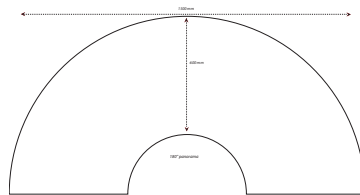
Using a high-pressure cleaner or solvent (acetone).

Cutting and shaping

Lava lends itself well to sawing and a waterjet cutting process. Practically any shape can be obtained as long as a few basic precautions are taken (please consult us). Shaping of plaque edges by grinding: smoothed edges, quarter-round edges, half-round edges, special shapes.



270° half-moon shaped orientation table,
South of France



round 1,000 mm & orientation table
regional nature park in Corsica.

