

## Bagnarola, Sesto al Reghena (Pordenone, Italy) Piazza IV Novembre



The first one of its kind, this project involved the recovery of old, badly deteriorated porphyry paving and its re-use for the same site.

The old 4/6 cm porphyry paving cubes were recovered by cleaning them in a tumbler and then carefully selecting the ones that could be re-used, thanks to which it was then possible to create a new, protected pedestrian zone (stress class P6 according to Italian standard UNI 11714-1) with bars and shops. The road part of the piazza on the other hand, designed to include a drainage function, was paved with new 6/8 x 6/8 cm cubes sealed with MAPESTONE JOINT polyurethane binder.

The advantage of the tumbler recovery system, which has to be carried out in an authorised facility, is that not only does it enable all types of porphyry and/or other stone elements be re-used, but it can also be employed to obtain usable materials from waste products, whose functionality and aesthetics can be further enhanced, especially if used with the MAPESTONE system.

### TECHNICAL DATA

**Year of the intervention:** 2020  
**Installed materials:** porphyry cubes; Pietra d'Istria stone  
**Design:** Edi Innocente  
**Works director and**

**project manager:** Edi Innocente  
**Stone supplier:** Consorzio Italiano Porfido del Trentino - Italtorphyry - soc. cons. coop.  
**Main contractor:**

Paving Stone srl  
**Mapei coordinators:** Marcello Deganutti, Grazia Signori, Mapei SpA (Italy)

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## PORPHYRY PAVING: ONE OF THE VALUES NEW ENVIRONMENTAL POLICIES ARE BASED ON

WE SPOKE WITH ANDREA ANGHEBEN, DIRECTOR OF CONSORZIO ITALPORPHYRY

### Mr. Angheben, what does Consorzio Italtorphyry do exactly?

All things considered, quarrying and processing porphyry isn't that difficult. But to be an instrument at the service of design work and works management is a completely different story. What makes Consorzio Italtorphyry stand out from the other companies in this sector is, first and foremost, our ability to present ourselves as a partner for our clients, offering the availability of our wealth of experience and knowledge to a design team in order to have a constructive exchange of ideas that leads to the most suitable and informed choices being made, not only in terms of materials, but also the work procedures to implement on site.

### In this case, what was your contribution and what was the distinctive feature of the project?

While waiting for the Italian eco-sustainable protocol regarding roads and paving to be drafted and implemented, Consorzio Italtorphyry became a precursor of an innovative project for the recovery of the old, worn porphyry paving, thanks also to the availability of an authorised processing centre that is a member of the consortium. Our aim was to limit waste and introduce procedures to demonstrate the sustainability and durability of old materials by enhancing them to extend their service life. After all, paving is often

found to be in poor condition, but most of the porphyry cubes that make up the paving are perfectly sound, so it's a pity to dispose of such a noble product which still has good performance properties and, more importantly, is part of the heritage of local communities. In the specific case of Bagnarola, we had no hesitation in proposing to the local council the recovery of the old, deteriorated 4/6 cm cube paving by tumbling the old stones and then reinstalling them in the pedestrian area. For the road part, exposed to stress levels of class P8 according to Italian standard UNI 11714-1:2018, there was no other choice than to use 6/8 x 6/8 cm porphyry cubes, for which we improved their performance properties even further by sealing them with MAPESTONE JOINT polyurethane resin. And the results proved us right, not only for the positive feedback we got from the residents of the town, but also for the effective cost saving for the client and a perfect balance of functionality, aesthetics and durability.

### Do you think there will be more to come following the project in Bagnarola?

Yes, without a doubt. The objectives that can be achieved through a coherent project for the recovery of porphyry paving are the values and parameters that new environmental policies are based on. This project in Bagnarola is just the start of a journey to share with government bodies.



Paving made from assorted sizes of recovered cobblestones, cubes and irregular stone units sealed with MAPESTONE JOINT.



Cobbles and cubes in various sizes were installed in a characteristic pattern and grouted with MAPESTONE PFS2 to make it easier for pedestrians to walk cross.