



## Almadén de la Plata marble: a Heritage Stone Proposal

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Almadén de La Plata marble is located in Ossa-Morena Zone (Iberian Massif) and generated through Variscan metamorphism of Cambrian limestones, being exploited during the Roman period. They were used in a wide variety of ways, such as architectural elements and decoration, statuary, and epigraphic monuments. The quarries for these marbles did not reach the dimensions found in other places (i.e., Vila Verde de Ficalho, Rosal de la Frontera, Alconera, Fuenteheridos-Navahermosa and Aroche), where they were exploited until the 20<sup>th</sup> century and where they continue to be exploited (Estremoz, Trigaches, Viana do Alentejo) until our days. Perhaps for this reason, the Roman quarries have survived to this day with an exceptional state of conservation, allowing the perception of what a marble quarry would have been like in the Roman period, as well as the methods and techniques used in the extraction of blocks which can also be observed.

The geological area of Almadén de la Plata marble, which comprises two main ancient exploitation places (Cerro de Los Covachos Quarry, which was completely excavated and musealized for public exhibition, and the Cerro Loma de Los Castillejos quarry), is spatially limited, being located near the E-W direction suture zone between the Ossa-Morena Zone and South Portuguese Terrane.

The marbles appear in the foot-wall of a calco-silicate series, being predominantly calcitic, although there are also dolomite-rich marbles with significant input of silicate minerals. Silicate phases are commonly micas, quartz, diopside, plagioclase and olivine, among others, which indicates that they have been subjected to amphibolite facies metamorphism.

Studies by several authors reports that the marble of Almadén de la Plata reached western areas of the Baetica Roman province (for instance, have been included in a line of research on the monumentalization processes of the Roman towns of: Hispalis, Italica, Astigi, Celti, Carmo, Malaca, among others), but also in other mainland places, such as Segobriga (Saelices, Cuenca) and even

cities located in the north African province of Mauretania Tingitana, like Thamusida and Banasa, in present-day Morocco.

On a separate note, we can consider that all occurrences of Palaeozoic marbles from the Ossa-Morena Zone in Portugal and Spain could perfectly be framed within the concept of Heritage Stone Province.

As far as we know, in the short term, no start of modern exploration of the Almadén de la Plata marbles is expected. Still, there are cases of recent application of them, for example there is a typical Almadén de la Plata street, famous for its cobblestone pavement, built by José Antonio Benítez, a local resident, that is tied to different historical events and Almadén's way of life. In any case, the intensive use of this marble in hundreds of monuments, mainly during the Roman period, with the heritage burden associated with this use, makes Almadén de la Plata Marble, Seville Province – Spain, an outstanding candidate for Heritage Stone.

*Acknowledgments: This work is supported by national funding awarded by FCT - Foundation for Science and Technology, I.P., projects UIDB/04683/2020 and UIDP/04683/2020.*