



Luserna Stone: A nomination for “Global Heritage Stone Resource”

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ABSTRACT

Luserna Stone (Pietra di Luserna) is the commercial name of a grey-greenish leucogranitic orthogneiss, probably from the Lower Permian Age, that outcrops in the Luserna-Infernotto basin (Cottian Alps, Piedmont, NW Italy) on the border between the Turin and Cuneo provinces.

Geologically speaking, it pertains to the Dora-Maira Massif that represents a part of the ancient European margin annexed to the Cottian Alps during the Alpine orogenesis; from a petrographic point of view, it is the metamorphic result of a late-Ercinian leucogranitic rock transformation.

Lithological features and building applications allow the recognition of two main varieties: 1) a micro-augen gneiss with very regular schistosity planes with centimetric spacing and easy split workability, known as Splittable facies; 2) a micro-Augén gneiss characterized by lower schistosity and poor split, suitable for blocks cutting machines (diamond wires, gang-saws, traditional saws), known as Massive facies. A third, rare, white variety also exists, called “Bianchetta”.

Luserna stone extends over an area of approximately 50 km², where more than fifty quarries are in operation, together with a relevant number of processing plants and artisanal laboratories. The stone is quarried and processed since almost the Middle Age, and currently represents one of the three most important siliceous production cluster in Italy (together with the Ossola and Sardegna Island granites).

Some characteristics of this stone - such as the relevant physical-mechanical properties, an intrinsic versatility and its peculiar splittability - have made it one of the most widely used stone materials in Italy and in the countries surrounding the North Western border of Italy.

Apart from its intrinsic geological, petrographic, commercial and technical properties, several issues related to the Luserna Stone are considered to be of relevant importance for its designation as a Global Heritage Stone Resource, such as the distinctive mark on the architecture and urban landscape of many areas in NW Italy, some quite peculiar applications (for ex.: the “so-called “loze” or “lose”, for the traditional roofing in alpine buildings) and the related constructive culture, the presence of an Eco-Museum, the occurrence of a local Fair (Pietra & Meccanizzazione), and many other important aspects.

