



Ruschita Romanian marble – 130 years of official exploitation and 130 m depth of architectural beauty around the world

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Developed in a large metamorphic area, the marble deposit from Ruschita perimeter is the most important Romanian source for ornamental stone, the old quarry being operative since 1883. The closest locality offer the commercial name also, identical with the geological one as is defined in the technical referentials and in the denomination European standard.

Ruschita is also an active quarry, developed by step-by-step expansion in depth (the initial extraction reached 130 m depth), but also in the adjacent areas. The important height of the open deposit offered the possibility to the owner, MARMOSIM SA, to apply an experimental extraction method, by underground mining. It is the only Romanian place, and few in the world, where this spectacular mining element can be found for dimension stone. The extraction gallery was built starting from the lower level of the old quarry and allowed obtaining nicer and bigger blocks.

The Ruschita marble is a metamorphic stone with high crystallinity and medium size of crystals (until 0.2-0.5 mm). Has the basic colour from white and grey to pink, with many intermediary nuances generally given by grey veins and less by impurities from internal structure. The stone present irregular break, sometimes following the very narrow internal discontinuities, invisible at macroscopic analyse.

The main physical – mechanical characteristics are presented below:

Characteristic M.U. Value

Apparent density Kg/m³ 2680 – 2720

Water absorption % 0.12 – 0.21

Capillarity g/m².s^{0,5} 0.130-0.218

Porosity % 0.30 – 0.74

Compression strength N/mm² 85 - 120

Flexural strength MPa 15-18

Rupture energy J 5

Coefficient of frost cleftness % 10 -14

Abrasion resistance - Bohme cm³/50cm² 17-18

Salt crystallization % 0.1

Nowadays, the extraction in the Ruschita area is achieved by equipments from Dazzini, Fantini, Pellegrini, Korfamann, Caterpillar, Volvo and Komatsu. The average volume of blocks is bigger than 10-12 m².

The Ruschita marble can be easily cut at size and the slabs being used both for inside and the outside application: from flooring, walling, stairs, solid masonry units, capitals, plinths, fireplaces, kitchen tops (even if not-recommended because is not resistant to acids), tablet, architectural elements, until paving and flooring works, elements in contact with the floor, non-vertical surfaces etc. A bigger attention has to be paid for using of Ruschita marble at external facades in those regions with many freezing - thaw cycles per year with big differences between the lower and higher value of temperature, because the stone can suffer important damage due to the different thermal dilatation coefficient. In this case, the recommended thickness of panels is bigger than 2 cm, the lustre final polishing

The Dom from Milano – known as into a continuously maintenance work in the last 500 years - was partially rebuilt in the '70ties with Ruschita marble. Another interesting places where this marble was used are: the Parliament buildings from Wien (Austria) and Budapest (Hungary), BBC centre from Menheim (Germany), architectural elements from Michael Schumacher's villa from Monte Carlo or the bathrooms from sultan's palace in Brunei.

Similar to other type of marbles used as in the ornamental stone industry, Ruschita type combines the specific colour with the internal structure, qualitative properties and unique ornamental characteristics. All these are decisive elements recommend the Ruschita marble as candidates for “Global Heritage Stone Resource” designation.