

QUARTZITE NAMA

MINERALOGICAL - LITHOLOGICAL FEATURES

NAMA Quartzite is a high grade metamorphic quartzite derived by several transformation and recrystallization phases of very old (700 million years) sedimentary sands, involved in antique large scale geodynamic events. The metamorphic processes which involved chemical-physical transformations, under high temperature and pressure conditions, have strongly modified the original structure of the stone (sand → sandstone → quartzite)

giving *NAMA Quartzite* very good and high mechanical and aesthetic characteristics, unique in the world market scenario.



MINING RESERVES

Being the Concession area very large (hill ridge long more than 100 Km and high 150-250 m) the mining reserves can be really considered "Infinite", all owned by the production company itself.

NAMA Quartzite, on outcrop, shows a unique regular splitting surface (old bedding parallel to metamorphic schistosity), spaced 0.5 to 8 cm, marked by thin mica layers. Thanks to this particularity, *NAMA Quartzite* easily splits along these less resistant beds, in a very regular way with perfect parallel and regular planes (natural calibration) and smooth surfaces.

MAIN UNIQUE FEATURES of *NAMA QUARTZITE*

- Thickness exceptionally regular and constant (naturally calibrated);
- Regular smooth surfaces; anti-slip natural surfaces due to the presence of quartz grains;
- General homogeneity, regularity and isotropy;
- Material perfectly workable on the edges due to its mineralogical features (regular composition with quartz > 96 % and regular micro granulometry) and isotropy;
- Very elegant aspect with bright shading surfaces.

CHEMICAL - PHYSICAL CHARACTERISTICS

(Test at SA bureau of standard test - rep. N°611/83052/88 e 611/81271/91 / 588/67776/2000)

Mineralogical composition	Quartz (SiO ₂)	96 - 98%
	White Mica	02 - 04%
	Others	0.0 - 0.5%
<i>Frictional wear test</i>	0.50 mm	
<i>Hardness (M.O.H.S scale.)</i>	7.5	
<i>Thermal linear expansion coeff. (under temperature of 20°C-286 °C)</i>	1.59 x 10 ⁻⁵	
<i>Imbibition coefficient</i>	0.86	
<i>Uniaxial compressive strength</i>	160.7 Mpa (dry)	
	165.3 Mpa (wet)	
<i>Uniaxial compressive strength After frizzing cycle</i>	159.2 Mpa (dry)	
<i>Flexural strength</i>	18.5 Mpa (dry)	
	18.1 Mpa (wet)	
<i>Visual test after freezing-defreezing</i>	no fractures	
<i>Lost of mass</i>	0.50	
<i>Resistance to chemical agents</i>	satisfactory to citric acid and cloridric acid	

NAMA Quartzite is an exceptional hard stone, highly resistant to compression and flexion. Moreover, it has very good resistance to frizzing and to chemical attacks, being mainly composed of recrystallized interfingering quartz grains.

Following its mineralogical features and the naturally splitting surface *NAMA Quartzite* also exceptional has anti-slip characteristics.



STANDARD PRODUCTS

- Crazy paving ("Opus Incertum") giant and standard - thickness 2.0 - 3.0 cm
- Sawn tiles, squared and random length with the following side measures: 15 - 20 - 25 - 30 cm
- Thickness: <1.0 cm; 1.0 - 1.5 cm; 1.5 - 2.0 cm; 2.0 - 3.0 cm; 3.0 - 4.0 cm.

USES and WORKS REALIZATIONS



NAMA Quartzite, thanks to its high mechanical and frizzing resistance, is naturally suitable for large paving works with high grade of trampling and wear, like external urban landscaping projects in any climate (squares, pedestrian paths, roads).



The elegant appearance and the regular surfaces of *NAMA Quartzite* also enhance the value of private indoor and outdoor projects, like halls, saloons, stairs, bathrooms and kitchens, terraces, gardens, pedestrian paths, arcades, swimming pools areas etc.



Rock Planet S.r.l.