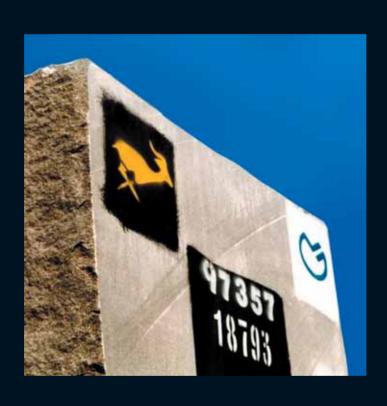
< م \geq 0 α Ш

Z









Quarrying of dimensional granite blocks first took place in South Africa in the late 40's and early 50's just as the application of granite was becoming more predominant worldwide.

Initial activity in 1947 was at Nell's Quarries in Rustenburg, followed in 1950 by the establishment of Parys Granite (South Africa's first patterned granite).

The appeal and potential of Rustenburg granite quickly became apparent and focus then shifted strongly to the Rustenburg area. Quarrying operations were established in succession at Springbok in 1950, Taylor's in 1957 and Cannata in 1960 followed by a further number of small family operations.

IMPALA

Due to small operator limitations, lack of suitable equipment and the easy access to surface boulders, quarrying was mainly carried out by tower / jib cranes which could be easily moved between boulder sections. This led to a production period during which the Rustenburg granite deposits were interlaced with tower cranes and their supporting steel wire 'stays' - a dated method of quarrying which was not sustainable.

Technology within the industry developed and quality improved to such an extent that no tower cranes remain in operation today. A highly professional mining approach backed up by detailed geological mapping, latest technology drilling and cutting equipment together with specially developed heavy plants has transformed the dimensional stone extraction process in the Rustenburg area into its present status, which is regarded as an industry showpiece.



In the course of this progressive development South Africa's previously low profile natural stone industry attracted strong investor interest both locally and internationally. A series of acquisitions and listings on the Johannesburg Securities Exchange ensued with Marlin becoming the first dimension stone producer to list in 1986, followed by Kudu and Kelgran.



Lack of international exposure and the growing complexities of trading conditions resulted in the involvement of major international corporations, well known local mining houses, as well as private investors - amongst which was Finstone S.à.r.l. (Luxembourg).

In 1995 Finstone purchased a controlling interest in Marlin Corporation and via this investment went on to acquire control of Minaco Granite and Marble, Kudu Granite Holdings, Impala Granite and Natural Stone Quarries. Following some restructuring this resulted in the establishment of the largest single natural stone producer in South Africa and of Nero Impala® granite in particular.



As part of the restructuring of the Finstone Group and in order to integrate its South African assets into its international framework, an offer was made to minority stakeholders in 2002 resulting in Marlin's subsequent de-listing. In 2003 an opportunity arose for Finstone, together with RED Graniti S.p.A. (Italy), to acquire a controlling interest in Kelgran Investments (Pty) Ltd. To achieve this, a joint venture company 'JVK' was formed and an acquisition agreement with Kelgran was finalised on 1 July 2004. Up to that time, Kelgran was the 2nd largest producer of Nero Impala® material.



Currently the Marlin Nero Impala® quarries are producing in excess of 45 000m³ per annum but as market conditions improve the capacity can be restored to the previous level of 75 000m³ per annum.



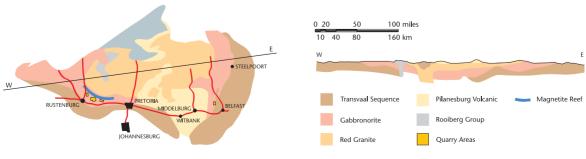


Nero Impala® is produced from the renowned Bushveld Complex, over 2 billion years old, and by far the largest known intrusion of its kind in the world. This layered igneous complex underlies an area of about 66 000 km² with the host sediments and individual layers gently inclined towards the centre at angles of 6°-25° degrees. Erosion has planed off these saucer-shaped layers so that they outcrop at surface level in a series of concentric arcs.

The Rustenburg Layered Suite, a basic plutonic phase of the intrusion, has been divided into four major units, with three of these being of economic significance. The Critical Zone contains the world's largest known deposits of platinum group metals and over half the world's chrome ore, while the Magnetite layers in the Upper Zone are the world's largest source of vanadium. Sandwiched between these is the Main Zone, from which Nero Impala® and other Nero Africa type dimension stone are produced. The gabbronorites mined from the Main Zone are coarse-grained plutonic rocks comprised of plagioclase, orthopyroxene and clinopyroxene with minor amounts of quartz, magnetite, apatite, hornblende and mica.

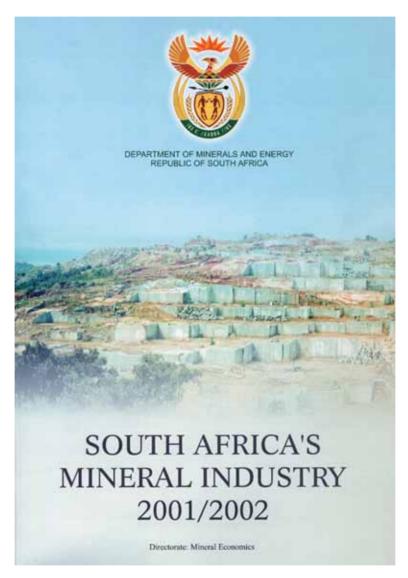
At least five distinct layers or sub-zones have been identified within the Main Zone. Sub-zone C is the most economically important of these from a dimensional stone mining point of view, and has a thickness of at least 200m in the Rustenburg-Marikana area, compared with a total thickness of nearly 3 000m for the Main Zone. Sub-zone E is thinner and somewhat erratic. Mineralogically, the economic Sub-zones are distinguished by the presence of orthopyroxene in the form of inverted pigeonite, while the 'ordinary gabbronorites' contain primary orthopyroxene. Although mineralogically a small difference, the presence of inverted pigeonite has a remarkable effect in terms of the quality and consistency of the stone, and is also the major determinant of the texture and grain size of classical Nero Impala® which only occurs in the Rustenburg-Marikana area. A material of intermediate composition between the 'ordinary gabbronorite' and the true Nero Impala® material, containing significant amounts of both inverted pigeonite and primary orthopyroxene is found in isolated pods within Subzone B and has some economic potential.

While the mineral content of the gabbronorite remains consistent, the colour varies both regionally (darker in the west near Rustenburg and lighter in the east towards and beyond Brits) and within individual formations. This variation is due to the colour of the plagioclase feldspar, which varies through shades of blue-grey to brown in the Nero Impala® deposits to almost white in the other materials produced in neighbouring areas which are labelled and classified as Nero Africa. The joint and vein spacing is such that a well developed Nero Impala® quarry generally produces around 60% -65% large blocks (>240cm x >120cm), 25%-30% medium sized blocks (>200cm x >10cm) and less than 10% small blocks over time. Small quarries over short periods may render lower percentages as there is no combining of production from different areas. The recovery of saleable material from Nero Impala® quarries averages 10%-12% as a result of the degree of natural faults and defects occurring in the underlying formation.



The Bushveld Igneous Complex

West East cross section of the Bushveld Igneous Complex



SPRINGBOK QUARRY



More comprehensive environmental practices were introduced to the Marlin Group's Rustenburg operations during the 1990's in parallel with the introduction of more professional mining and management practices.

Historical surface boulder mining which had been practised throughout the Rustenburg dimension stone district prior to 1994 had a marked effect on both the environment of the area as well as on the longer term sustainability of mining operations. This was particularly the case when front-end loaders started to replace jib cranes for the handling of blocks and removal of waste during the late 1970's and early 1980's, a period which coincided with a rapid increase in demand for Nero Impala® material. This mechanisation meant that it was much easier and quicker to move to a new quarry site when recovery dropped, or when the loose boulders were worked out at a single location, thus keeping unit production costs at a minimum. The outcome though had a further impact on the Rustenburg dimension stone quarrying region from an environmental point of view, with few hillocks left untouched and with waste dumps and gravel pits being established at random, as close as possible to the quarrying site. The inevitable outcome of this random approach was that significant areas of reserves became inaccessible without involving high cost redevelopment. By the mid 1990's many companies in the Rustenburg area faced serious financial difficulty as a direct sequel to these short-term mining practices, and many smaller operators closed their doors.

Proper mine planning, together with improved wire saw technology and a thorough understanding of the geology has allowed the development of modern solid formation quarries in the Marlin Group's Rustenburg operations. These quarries are not only sustainable from a technical and economic point of view but are also operated with a much reduced environmental impact. This can be seen especially in the newer quarries such as Elandsfontein and Wonderkop which have been developed by Marlin over the past few years. In addition, sound planning of mining and rehabilitation activities at the existing quarries has rendered it possible to reduce the estimated long term rehabilitation costs, even with rehabilitation being conducted to substantially higher standards than the requirements set by the Department of Minerals and Energy. The standard now set by Marlin for the rehabilitation of historical disturbances is now regarded as a benchmark in the dimension stone industry both locally and internationally.





Though there are still areas where historical operations have not yet been rehabilitated, due to future mining plans for these areas, Marlin has demonstrated its commitment to sound environmental management principles. It has done so both in terms of the standard of rehabilitation being applied to 'mined out' and current mining areas, as well as through the Group's involvement with environmental groups whose members are invited to participate in the annual environmental audits conducted on the mines, and who are actively consulted in the drafting of appropriate environmental management programmes. As a result of this transparent and consultative approach, better understanding and cooperation has been achieved in support of the Marlin Group's new mining applications.







The Marlin Group's Rustenburg operations are staffed and managed by one of the most experienced and professional teams to be found in the worldwide dimension stone industry. A combination of skills from experienced mining engineers, geologists and surveyors, second and third generation quarry masters, highly capable earthmoving machine operators and dedicated rock drill operators make up a team currently totalling 520 people who are committed to achieving the highest standards of excellence in the production of quality granite for the local and international markets.

Based on a rigorous set of core values and a culture of continuous reassessment, the Group strives at all times to achieve, sustain and improve key values. These include:

- Pride and ownership among employees in their approach to their role
- Development of skills and recognition of individual and team performances
- Innovation and leadership in all aspects of a highly specialised business
- Meticulous planning before implementation
- Passion for ensuring quality
- Zero tolerance approach towards any relaxation of stringent health and safety conduct
- High level of environmental care and consideration

The sustained promotion and application of these values by example and training, together with strong leadership, has resulted in Marlin's Rustenburg operations achieving acclaim throughout the global stone industry, adding to the pride of the Group's shareholders, management and staff.





EDUCATION & TRAINING

Due to the technical advancement of the industry during the past decade, and in keeping with the national initiative, considerable emphasis is placed on education and skills development in the key areas of:

- Adult Basic Education Training (ABET)
- Computer Literacy
- Broad Technical Skills
- Artisan Skills
- Health and Safety

- HIV / Aids Awareness
- Multi-skilling
- General Supervisory Skills
- Managerial Skills

Acquiring skills and improving literacy is of utmost importance to South Africa's economic welfare and by employees progressing through various ABET levels, they are able to build knowledge, skills and competency in relevant areas leading to General Education and Training Qualifications (GET on National Qualifications Framework NQF). Marlin Group is also the first dimension stone company in South Africa to participate in the development of Unit Standards and Qualifications at the Mining Qualifications Authority.

Apart from 'in-house' skills development programmes, the Group's strategy is to seek Corporate Social Investment opportunities which can lead to job creation and educational upliftment in communities neighbouring the Group's rural operations. Wherever possible, such projects are implemented in a manner which will ensure that the stakeholders are able to sustain on-going viability. Audit and upgrading recommendations by consultants and the Group's managers ensure on-going improvement.





HEALTH & SAFETY

The Marlin Group's satisfactory health and safety record compares favourably with other major mining operations in South Africa and internationally, a factor which has been consistently recognised by the Department of Minerals and Energy not only in relation to dimensional stone quarrying, but to the mining industry as a whole.

As a large number of safety best practices have been implemented across the industry, it is a key corporate objective of the Group to maintain the health and well-being of all its employees. This objective is integrated into every aspect of the business with focus on:

- Consistent improvement of safety results
- On-going risk assessment with relevant action plans
- Monitoring of major risks at operational site level

Although comprehensive standards, guidelines, systems and procedures for a safe work environment are in place, the Group's goal of zero injuries cannot be achieved without the support and commitment of every employee and contractor on site. The Group has an uncompromising approach to hazard identification, risk assessment and risk management. A range of programmes ensure that employees understand their respective responsibilities and have the skills to respond in case of an incident or emergency.

The combination of detailed risk assessment, the introduction of comprehensive operating procedures and a zero tolerance to non-conformance has enabled the staff to attain and then consistently improve on world class safety standards.













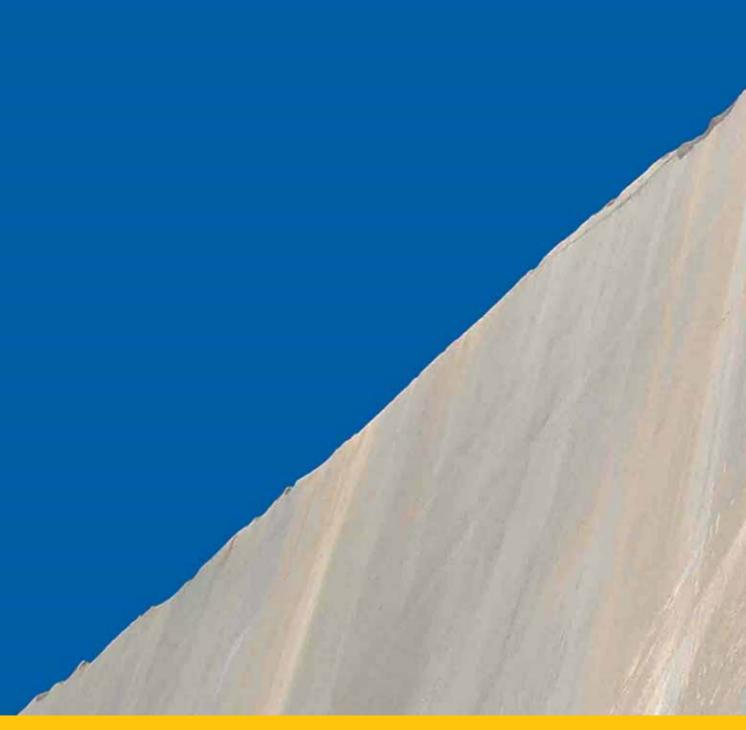
The Marlin Group's Nero Impala® quarries are established in the oldest area of dimension stone mining activity in a 20km long outcrop of Sub-zone C running from north of Marikana to north of Rustenburg. These quarries produce the highly sought after Nero Impala® material on which the reputation in the international market has been built since the early 1960's, and which has led to Nero Impala®'s position as the largest volume source of granite in the world.

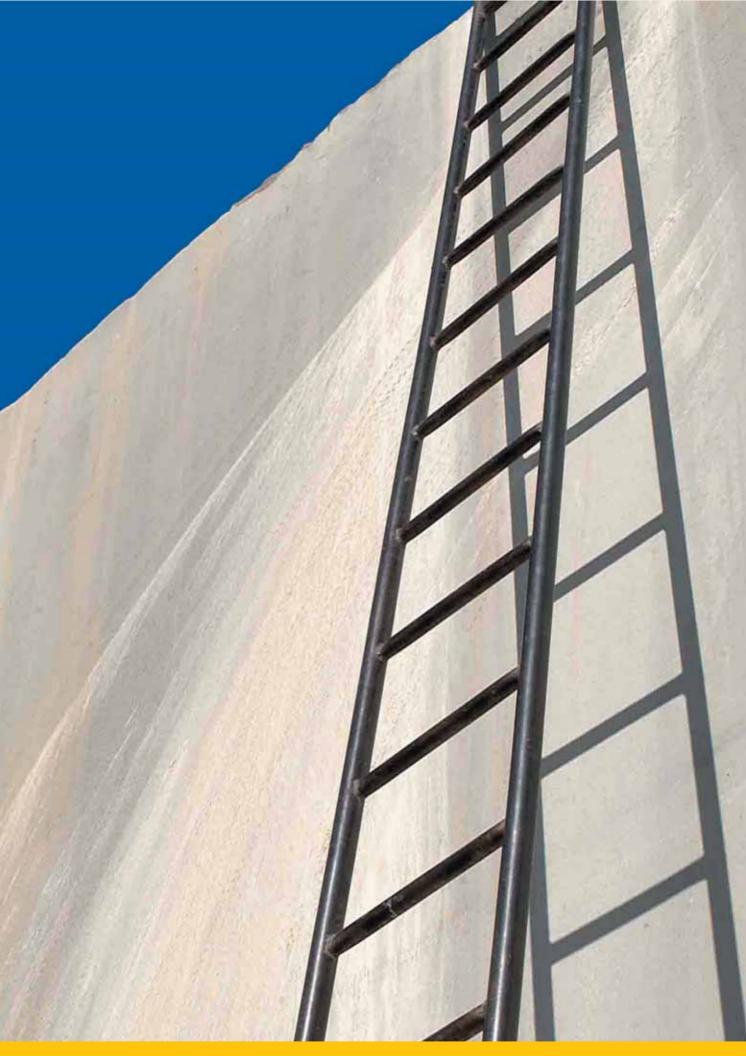
The newer operations producing Nero Africa material are situated outside the traditional production area within Sub-zone C, and are either within other layers of the stratigraphy or further east towards Brits. While Nero Africa is similar in appearance to Nero Impala® and has the polishing and other physical characteristics of the traditional material, the quality differs from the classical Nero Impala®. In order to sustain the current combined production from the region of between 140 000m³ and 150 000m³ per annum, the Marlin Group has led the development and application of new technology and mining methods within the South African dimension stone industry. It was the first company to apply formal mine planning to dimensional stone quarrying and then to pioneer the growing application of diamond wire technology specifically applied to the extraction process. Today Marlin's quarries are regarded as showpiece operations with diamond wire cutting specialists achieving the highest performance levels in dimensional stone extraction, whilst at the same time continuing to pioneer 'blind cutting' techniques in solid granite formations to facilitate overall quarry development. Similarly, Marlin has been leading the development of new explosive and non-explosive splitting techniques as well as recently developing new equipment capable of tipping slabs measuring over 3m in thickness with weight in excess of 1000MTs. This has facilitated the advance of slab mining technology within the Rustenburg area's unique geology, whilst simultaneously ensuring that block production is in a suitable balance of sizes to match market demand.



NEROIMPALA®







MARIKANA QUARRY



Opened in 1981 by Kudu Granite and acquired in 1997 by Marlin, the current mining lease area includes the old Natural Stone Quarries property and covers approximately 945 hectares. Currently Nero Impala® grade material is produced from the B12, L and T4 quarries and is graded as KD (Dark), KMD (Top Medium), KM (Average Medium), KMM (Bottom Medium) and KL (Light). As with most Marlin Group quarries, the material produced is very consistent in terms of grain size and structure, making it very suitable for use in large construction projects. This material is popular due to the contrast in colour between the grey background and the medium colour grain.







Production capacity: Up to 16 000m³ per annum, currently 9 000m³

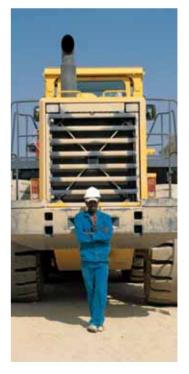
Material produced: Up to 60% of the material produced is classified average medium with the balance being classified as bottom

Block sizes : 70% of production is in gang-saw sizes with the balance

in the 200 x 100 size category and smaller







MINACO QUARRY

Opened in 1994 by Minaco and acquired in 1996 by Marlin, the current mining lease area covers approximately 690 hectares. Currently Nero Impala® grade material is produced from the B West, A7 and A7 Central portions of the quarry. The material is produced in M-KD (Dark), M-KMD (Top Medium), M-KM (Average Medium), M-KMM (Bottom Medium) and M-KL (Light). The current stratigraphic location of the quarry is such that oikocryst reflectors are generally small and limited in number, making the material highly sought after in both the construction and monumental markets. It is considered one of the best Nero Impala® materials on the market because of the uniformity of colour.

NEROIMPALA®







Life expectancy : In excess of 30 years

Production capacity: Up to 12 000m³ per annum, currently 10 000m³ **Material produced**: 60% of the material produced is classified as average

medium, 20% is classified as top medium and the

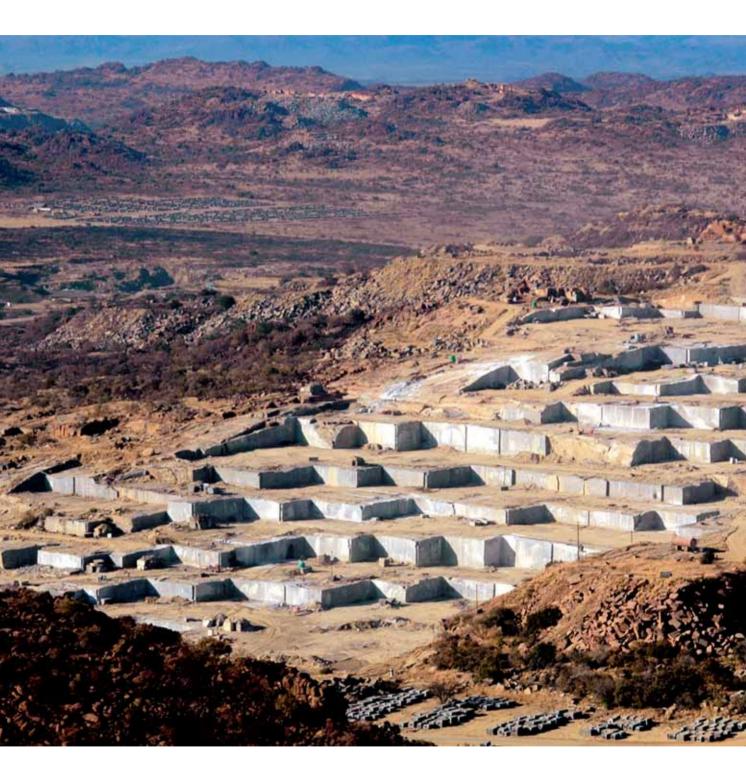
balance is classified as bottom medium

Block sizes : As a result of lower than average recoveries (less than

10%), only 55%-60% of production is available in gang-saw sizes with the balance in the 200 x 100 size

category and smaller

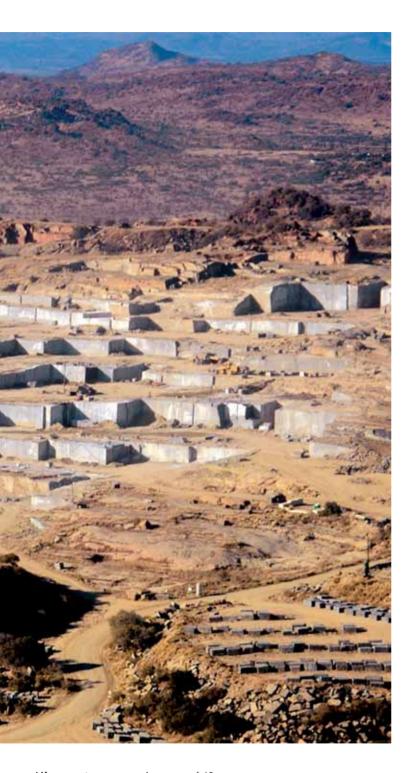
SPRINGBOK QUARRY



Quarried by Springbok Stone Industries since the 1950's, various mergers and acquisitions by Transvaal Granite, Impala Granite and Kudu Granite ultimately resulted in Springbok Quarry being acquired by Marlin in 1997. The current mining lease area covers approximately 575 hectares with the possibility of extending the reserves on the adjacent Transvaal Granite property covering approximately 350 hectares. Nero Impala® grade material is produced from two main reefs namely Y Reef where quarrying commenced in the early 1960's and E Reef which has been substantially re-developed since 1994 into one of the largest solid formation dimension stone quarries in the world. The material from Springbok Quarry is considered a premium material, and in fact the colour code for the dark material (IN) derives from Nero Impala®, originally used by Impala Granite to denote the top quality of material from this quarry. The colour material produced from Springbok Quarry is IN (Dark), SKD (Top Medium), SK (Average Medium), SKM (Bottom Medium) and TL (Light). The material is highly appreciated in the monumental market due to its dark colour.

NEROIMPALA®





Life expectancy : In excess of 40 years

Production capacity: Up to 30 000m³ per annum, currently 18 000m³

Material produced : Up to 40% of the material produced is IN (Dark) with

the balance produced being SKD (Top Medium) and

SK (Average Medium)

Block sizes : Due to the demand from the monumental market for

darker colours, only 55%-60% of production is in gang-saw sizes with the balance in the 200 x 100 size

category







TAYLOR'S QUARRY



Originally opened by Taylor's Granite in 1957, various mergers and acquisitions ultimately resulted in Taylor's Quarry being acquired by Marlin in 1997. The current mining lease area covers approximately 1 076 hectares, with all the production of Nero Impala® currently coming from the T7 quarry. Although the current production is minimal, there are sufficient reserves to expand production significantly in the longer term. The material is of good quality and similar enough to the materials fromSpringbok Quarry so that the medium colours are often used interchangeably. The material produced is graded as GD (Dark), GAD (Top Medium), GA (Average Medium), GAM (Bottom Medium) and GL (Light).





Life expectancy : In excess of 50 years

Production capacity: 2 500m³ per annum although there are sufficient

reserves to expand production to at least 15 000m³

Material produced : Most of the production is medium in colour with over

50% being average medium, 20% being top medium

and 10% being bottom medium

Block sizes : Approximately 65% of production is in gang-saw sizes

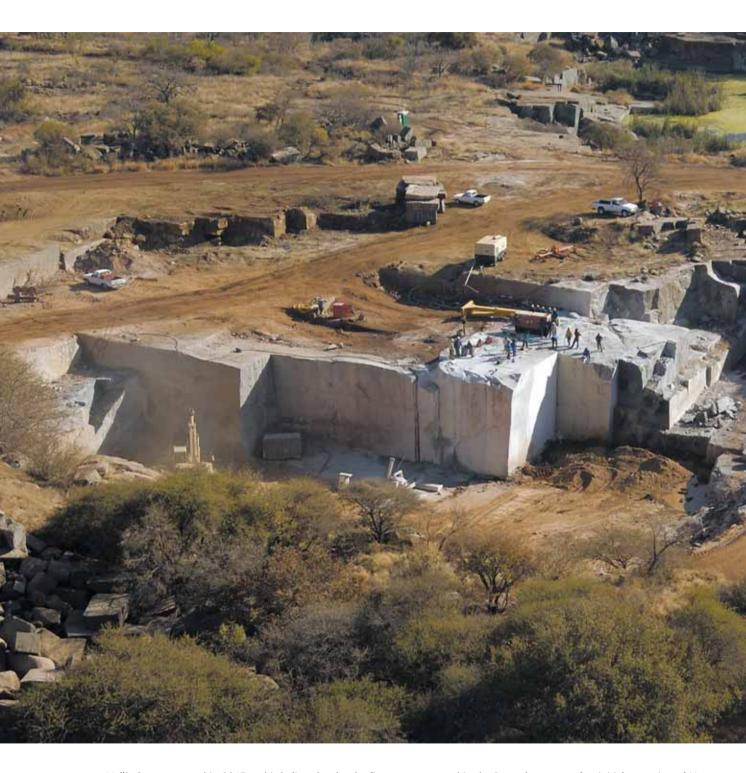
with the balance in the 200 x 100 size category and

smaller





NELL'S QUARRY

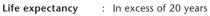


Nell's Quarry opened in 1947 and is believed to be the first quarry opened in the Rustenburg area after initial quarrying of Nero Impala® type material by Nell Brothers at Bon Accord, north of Pretoria, prior to the Second World War. Historically, the quarry produced a very dark fine-grained material used in the monumental industry but it seems that reserves of this type of material became exhausted during the 1980's with the quarry closing in the mid 1980's due to poor demand for this material. The quarry was reopened by Marlin in 2003 producing a medium to dark finer grained Nero Impala® material from a location to the south of the first quarry classified as NL-D (Dark), NL-MD (Top Medium) or NL-M (Medium). Currently around 50% of the production has 'ghosting' of feldspar concentrations which tend to have a linear trend perpendicular to the grain. This feature is often only apparent when the material is wet or when polish quality is very high. This material has found acceptance in certain markets where it is cut against the grain. As mining progresses toward the original quarry, it is anticipated that this characteristic will not be encountered, with increasing potential for production of the dark material.

NEROIMPALA®







Production capacity: Up to 3 000m³ per annum, currently 2 400m³

Material produced : Currently 25% of production is dark, 40% top medium

and 15% average medium

Block sizes : Production is mainly in the 200 x 100 size category,

but production of up to 70% in gang-saw sizes is

possible subject to market demand



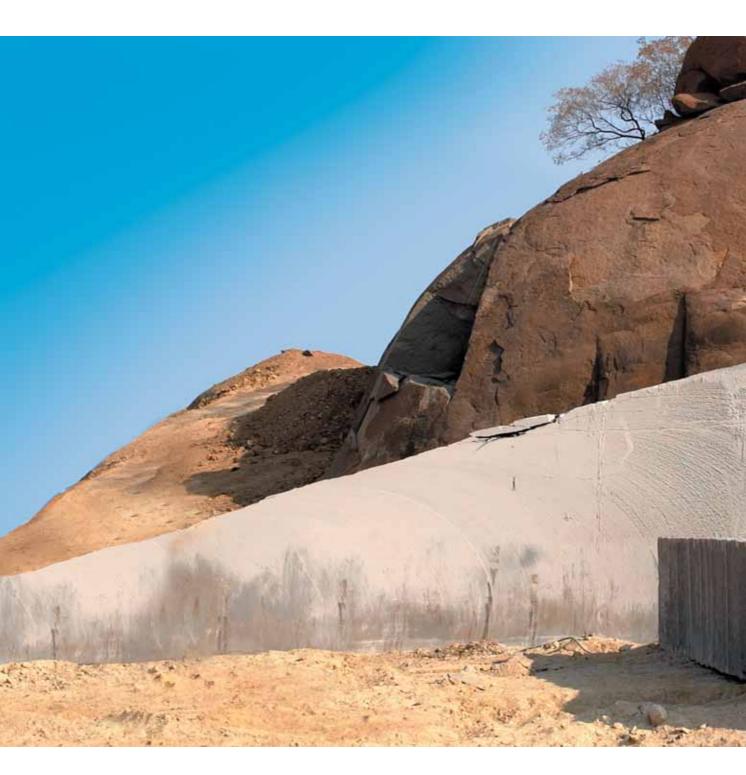








WONDERKOP QUARRY



Wonderkop was opened by Impala in 1988, but closed in 1992 after the merger with Kudu due to poor market conditions at the time. Wonderkop Quarry produces from a lithology within Sub-zone B containing both inverted pigeonite and primary orthopyroxene. This part of the stratigraphy may constitute a separate layer within the Main Zone, as several of the recent quarries in the Brits area appear to be mining the same lithology. The quarry was re-opened by Marlin in 2004 with significant potential for rapid expansion should this be warranted by market demand. The material has a slightly different grain structure from Nero Impala® with the light feldspars contrasting with the pyroxenes. The material is attractive in colour and characterised by numerous large reflectors which are not very apparent with high quality polishing. It has proved popular in applications where pricing is competitive.

N E R O A F R I C A





Life expectancy : In excess of 30 years

Production capacity: 3 000m³ per annum although there are sufficient

reserves to expand production to at least 6 $000\,\text{m}^3$

Material produced : The total current production is graded WK and is

average to top medium in colour

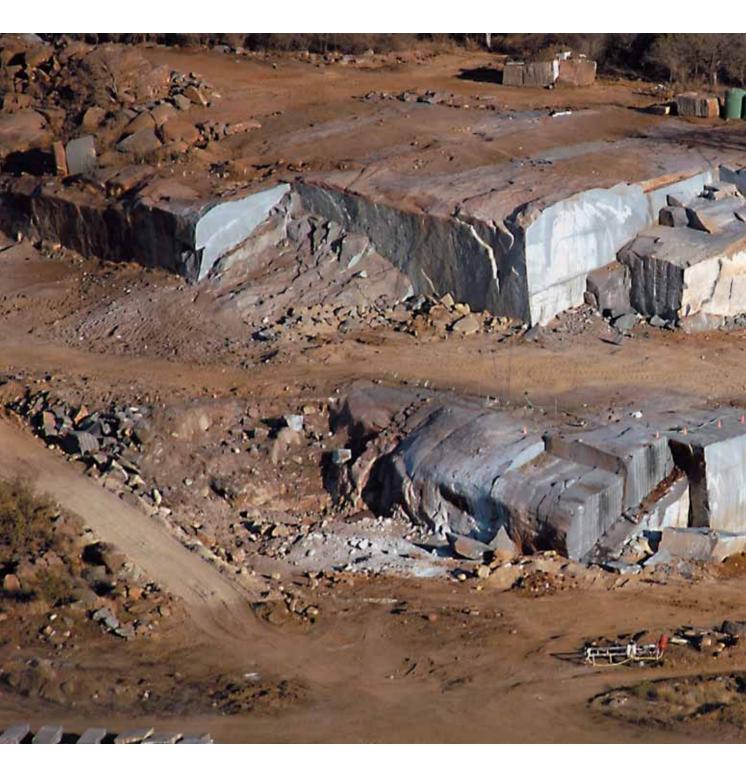
Block sizes : At least 80% of production is in gang-saw sizes with

20% in the 200 x 100 size category





ELANDSFONTEIN QUARRY



Opened by Marlin in 2003 Elandsfontein Quarry produces a Nero Africa material in the Brits vicinity. While colour is classified as average to bottom medium, the material appears lighter than Nero Impala® equivalents when viewed closely due to the light white colour of the feldspars. This also creates a high contrast with the dark coloured pyroxenes, which creates a material distinctly different to Nero Impala® in appearance. The colour range is classified as E-M (Medium), E-ML (Medium Light) or E-L (Light). It has gained a high level of acceptance in the South African market particularly when cut against the grain.

N E R O A F R I C A







Production capacity: Up to 1 500m³ per annum, currently 1 500m³ **Material produced**: All material produced is graded as E-M (Medium),

E-ML (Medium Light) or E-L (Light)

Block sizes : 65% of production is in gang-saw sizes with the balance

in the 200 x 100 size category







BERSEBA QUARRY



Opened by Marlin in 1995, Berseba Quarry produces a Nero Impala® type material of medium colour from within Sub-zone E. Although the colour is of acceptable medium quality, when compared to Nero Impala® the grain structure is slightly different, hence its individual grading. Berseba material contains magnetite crystals due to its proximity to the main magnetite marker, which is a caution to its use in severe outdoor applications, as chemical processes caused by heavily polluted air may cause rust staining as a result of the breakdown of this magnetite. Berseba material also displays minor pitting problems (probably caused by 'plucking' of inverted pigeonite or magnetite during the sawing and polishing process), which render it less suitable for specialised applications such as surface plates and certain monumental markets.

N E R O A F R I C A





Life expectancy : 10 years

Production capacity: Up to 2 500m³ per annum

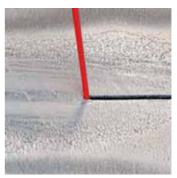
Material produced : All material produced is graded B-BC and is average

medium in colour

Block sizes : Around 75% of production is in gang-saw sizes with

the balance in the 200 x 100 size category

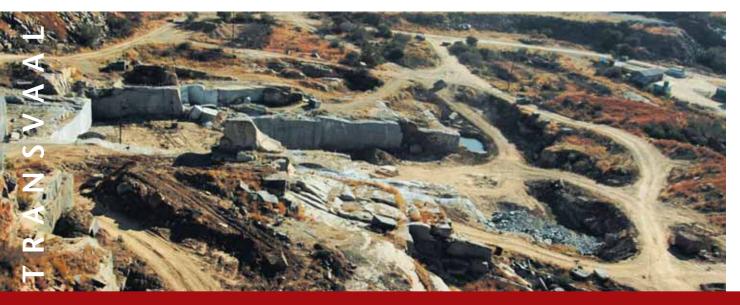




KELGRAN QUARRIES







N E R O A F R I C A



Keeley Granite commenced quarrying on the farms Beestekraal and Boschpoort in the early 1970's, but following changes in control between 1992 and 2005 these quarries are controlled and operated by the joint venture company 'JVK' formed between Finstone S.à.r.l. (Luxembourg) and RED Graniti S.p.A (Italy) as a result of its interest in Kelgran Investments (Pty) Ltd. The Kelgran operations will continue with re-development and expansion of quarrying activities on the 'A' and 'B' reefs in mining lease areas extending over approximately 1 400 hectares. The maximum production expectation for both the Beestekraal (RID & Tlapa Quarries) and the Boschpoort (Transvaal Quarries) areas is 40 000m³ per annum which is distributed between Dorking AG and RED Graniti S.p.A. (Italy).

RID9

The RID9 East and RID9 West Quarries were opened in March 2001, mostly mining within a 'marker' material overlaying the 'B' Reef which is a banded material marketed as 2nd grade. The sections were initially mined as development quarries to meet market demand for 2nd grade material with the longer term goal of establishing a solid quarry producing 1st grade Nero Impala® from a 100m thick mineable reserve. The material is classified as 1D4 (Dark), 1M1 (Top Medium), 1M4 (Average Medium), 1M9 (Bottom Medium) and 1L4 (Light) with only 30% of production being 1st grade.

Life expectancy : In excess of 20 years

Production capacity: Up to 17 600m³ per annum, currently 11 000m³

Material produced : Over 60% of production is commercial and 2nd grade material, average to medium in colour Block sizes : Up to 60% of production is in gang-saw sizes with the balance in the 200 x 100 size category

TLAPA 1

Tlapa 1 Quarry was opened in June 1999 and produces a uniform, fine-grained Nero Impala® material mostly top medium in colour with no reflectors. Up to 95% of the material produced is 1st grade.

Life expectancy : In excess of 20 years

Production capacity: Up to 6 500m³ per annum, currently 6 500m³

Material produced : 50% of the production is 1M1 (Top Medium) and the balance being 1M4 (Average Medium)

Block sizes : At least 55% of production is in gang-saw sizes with the balance in the 200×100 size

category and smaller

TLAPA 3

Opened in March 2000, Tlapa 3 produces 90% 1st grade Nero Impala® material. This material has no reflectors and a very consistent grain size and structure. The colour range is classified 1M4 (Average Medium) and 1M9 (Bottom Medium).

Life expectancy : 10 years

Production capacity: Up to 8 950m³ per annum, currently 8 950m³

Material produced : 70% of production is average medium with the remaining 30% being bottom medium Block sizes : 60% of production is in gang-saw sizes with the balance in the 200 x 100 size category

IN1 + IN3 TRANSVAAL

Originally opened by Marlin, various mergers and acquisitions resulted in the IN1 and IN3 Transvaal Quarries being acquired by Keeley Granite in 1989. Operations were halted in 1999 due to poor market conditions with the quarry being re-opened by Kelgran Africa (Pty) Ltd in November 2000. The Nero Impala® material quarried is classified as 1M1 (Top Medium) and 1M4 (Average Medium). At least 95% of total production is 1st grade material with a finegrain structure.

Life expectancy : In excess of 20 years

Production capacity: Up to 13 200m³ per annum, currently 10 500m³

Material produced: Up to 60% of the material produced is classified as top medium with the balance being

average medium

Block sizes : 70% of the blocks produced are in gang-saw sizes with the balance in the 200×100 size

category

IN2 TRANSVAAL

IN2 Transvaal Quarry opened in February 2000. Approximately 97% of the Nero Impala® material produced at IN2 Transvaal Quarry is 1st grade. The material is average medium in colour and fine-grained with a uniform grain structure.

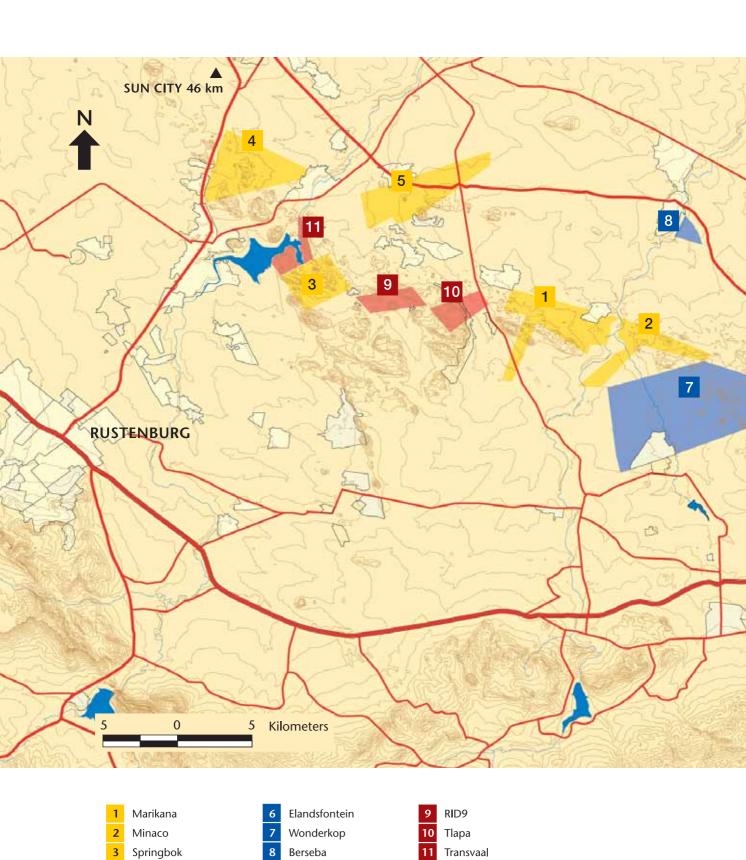
Life expectancy : In excess of 20 years

Production capacity: Up to 10 000m³ per annum, currently 6 600m³

Material produced : 70% of the production is 1M4 (Average Medium) and 30% is 1M9 (Bottom Medium)

Block sizes : 50% of the production is in gang-saw sizes with the other 50% in the 200 x 100 size category

QUARRY LOCATIONS

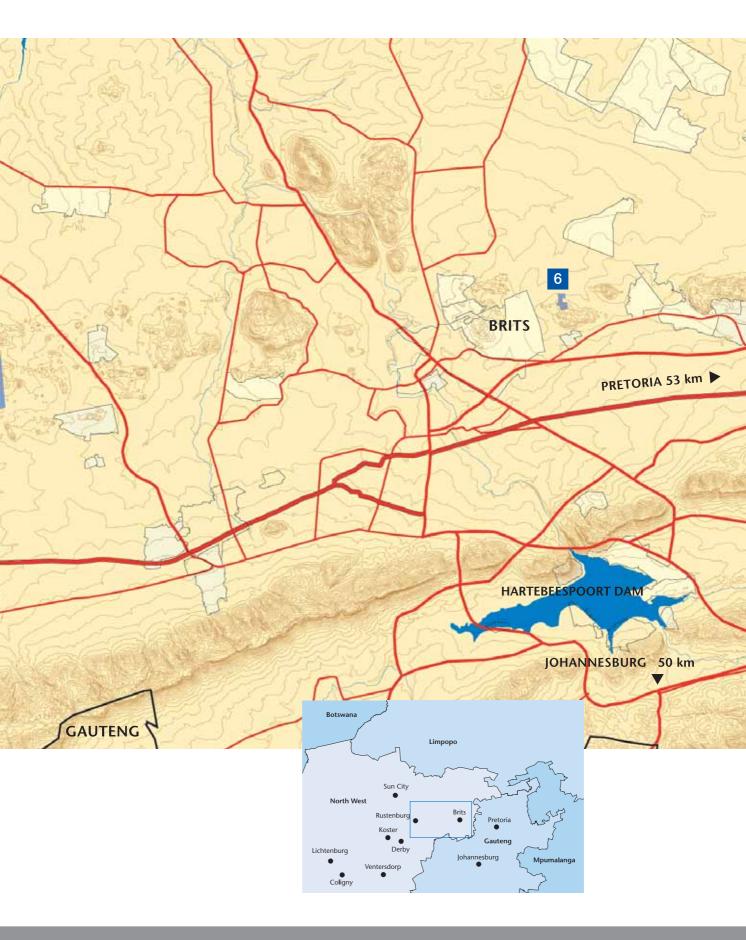


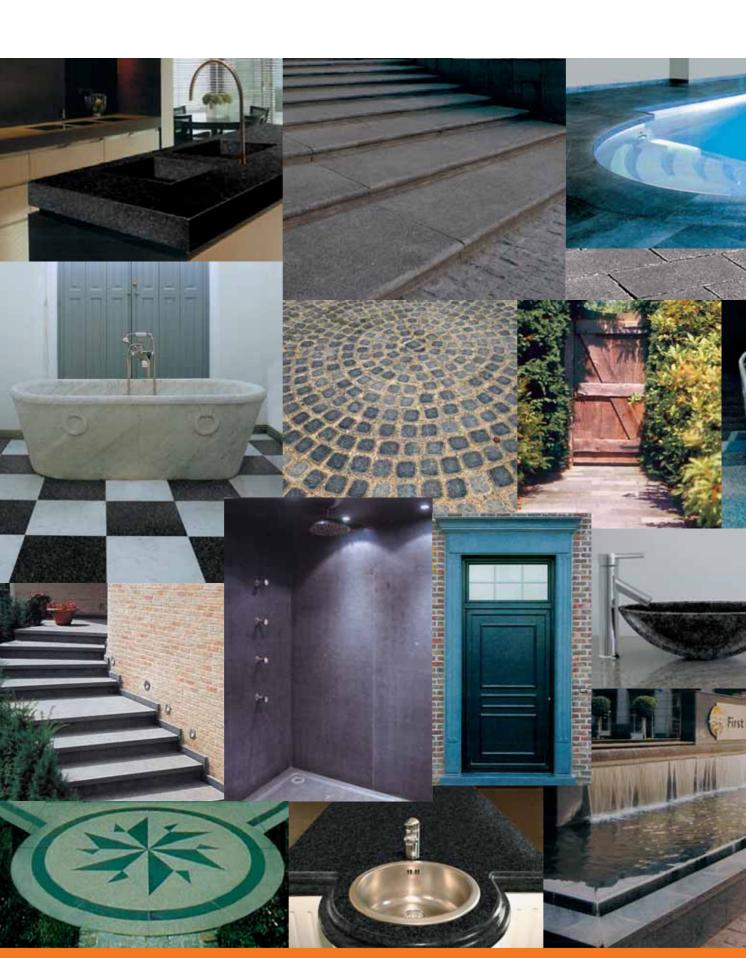
Berseba

Taylor's Nell's

Transvaal









Nero Impala® is an attractive, versatile and unique natural stone widely applied internationally because of its consistency, reliability of supply and dependable processing characteristics. Due to its numerous qualities which include practical colour, uniform grain structure, low maintenance and continuing affordability, Nero Impala® is suitable for an infinite range of applications:

- Nero Impala® is extensively used for exterior cladding due to its dark colour, low porosity and attractive grain structure in a composition which renders it frost resistant as well as unaffected by acid rain and pollution
- Nero Impala® can be used for all kinds of exterior paving including terraces, stairs, garden paths and sidewalks due to its hardness, anti-skid properties when the surface is flame treated, and resistance to wear and tear
- Nero Impala® has a practical and appealing colour which is unaffected by stains or moisture, enhancing the interior design of kitchen and bathroom surfaces through to fireplaces and floor tiling
- Nero Impala® is durable, easy to maintain and heat and stain resistant, making it an ideal choice for countertops and work surfaces
- Nero Impala® is one of only 3 materials worldwide that is widely used for surface plates due to its suitable physical properties and available block sizes
- Nero Impala® is used at length in the monumental market due to its even grain structure and suitability of colour in this traditional and multi-cultural sector

The beauty of Nero Impala® is that each surface finish offers colour differentiation varying from dark to much lighter shades of grey. This variation of colour allows for flexibility of use in a broad spectrum of applications.



PROJECTS









Safmarine Head Office Cape Town, South Africa

Texas Commerce Bank Texas, USA

Ewag Nürnberg, Germany

Land Bank Pretoria, South Africa

China Construction Bank

Prudential Tower Singapore

Rand Merchant Bank Johannesburg, South Africa

Hotel Tibesty Tripoli, Libya

Rosehill, Mauritius

Johannesburg, South Africa

London, England

Johannesburg, South Africa

A & M University Clayton W Williams Alumni Centre Texas, USA

Midrand, South Africa **Mauritius Union Assurance** Port Louis, Mauritius

United States Embassy Pretoria, South Africa

Mauritius Telecom Centre Port Louis, Mauritius

Bank City Johannesburg, South Africa

Botsalano House Gaberone, Botswana Inuzuka Is Building

Tokyo, Japan Whitefrairs

Texas, USA

Tax Office

London, England

Post Office Johannesburg, South Africa Corpus Christi Building

Department of Interior Johannesburg, South Africa

Warner Centre Plaza Los Angeles, USA

Amsterdam, Netherlands

Všeobecná Úverová Banka Mlynské nivy, Bratislava

Bank of Tanzania Dar-es-Salaam, Tanzania Nero Impala®, Rosa Duna

Nero Impala®

Nero Impala®

Nero Impala®

Nero Impala®

Hong Kong Nero Impala®, Grigio Malaga

Nero Impala®, African Red, Giallo Duna, Prairie Black

Nero Impala®, Bianco Sardo

State Bank of Mauritius Nero Impala®, African Red, Paarl Grey, Zimbabwe Black

Nedcor Bank Head Office Nero Impala®, Moka Crème Limestone

South Quay Plaza Nero Impala®, Paarl Grey

Edenburg Terraces Nero Impala®

Nero Impala® Firmenich

Nero Impala®, Verde SK

Nero Impala®, Rosso Gamma

Nero Impala®

Nero Impala®

Nero Impala®, Paarl Grey

Nero Impala® Nero Impala®

Nero Impala®, Monderiz

Nero Impala®

Nero Impala®

Nero Impala®

Nero Impala®

Nero Impala®

Nero Impala®, Verde Eucalipto, Carmen Red, Azul Platino, Balmoral Red

Nero Impala®, Namibian Pearl

FINISHES







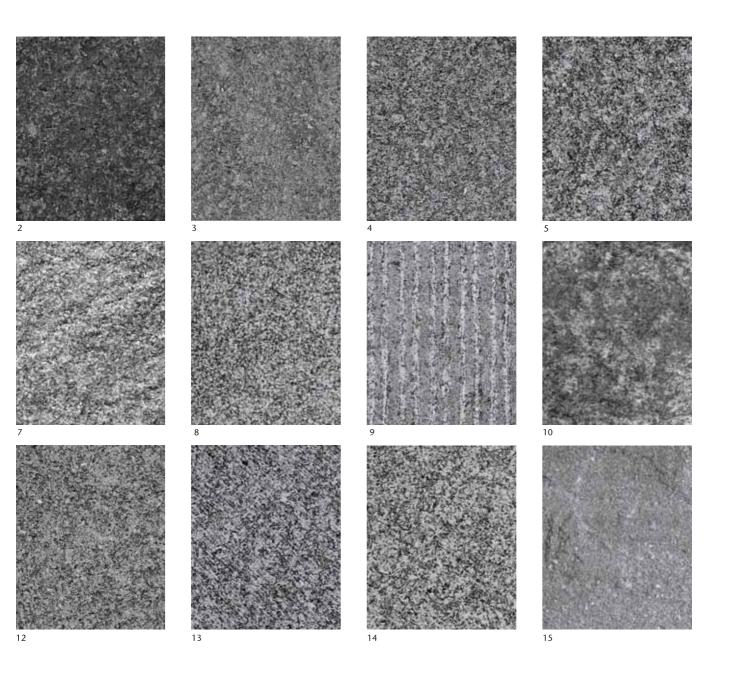


11

Nero Impala® can be used to enhance any environment and is available in a wide variety of finishes due to its versatility. Each finish defines the surface colour, texture and design as follows :

	NAME	FINISH	DEFINITION	COLOUR	THICK
1	Polished	Smooth	Glossy, highly reflective surface with full, vibrant colour	Dark grey	10mm
2	Honed	Smooth	Flat, low sheen surface with no reflection	Blue grey	10mm
3	Light honed	Smooth	Flat, low sheen surface with no reflection and fine round lines	Grey	20mm
4	Sandblasted	Rough	Matt, textured surface with fine granular appearance	Grey	20mm
5	Flamed	Rough	Rough surface with small reflective areas	Grey	20mm
6	Sawn	Rough	Rough surface with irregular edges	Grey	20mm





	NAME	FINISH	DEFINITION	COLOUR	THICK
7	Split	Rough	Rough, irregular surface	Grey	20mm
8	Bush hammered	Rough	Rough, textured surface with white pointillism structure	Dark grey	20mm
9	Chiselled	Rough	Rough, textured surface with parallel grooves	Grey	30mm
10	Tumbled	Smooth	Smooth surface with rounded edges and worn appearance	Grey	30mm
11	Acid washed	Rough	Rough, uneven surface with matt finish	Grey	10mm
12	Edelstahl	Rough	Rough, textured surface with light reflection	Grey	20mm
13	Taille ancienne	Rough	Rough textured surface with lighter coloured slanting fine grooves	Grey	30mm
14	Frost flowers	Rough	Rough, textured surface with a frost, flowery structure	Grey	30mm
15	River finish	Smooth	Uneven, smooth, matt surface with no reflection	Grey	20mm

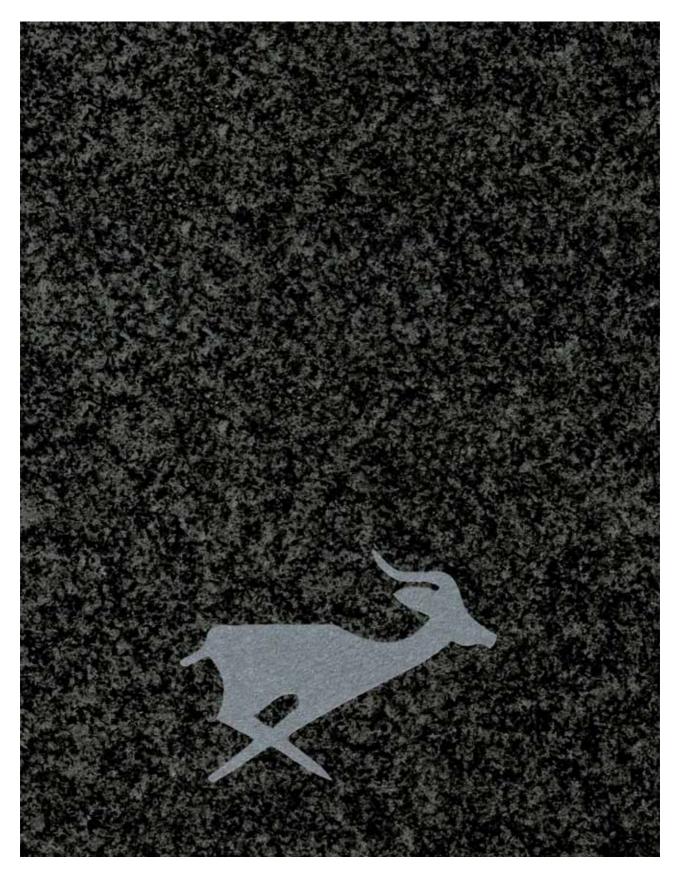


NERO IMPALA® DARK



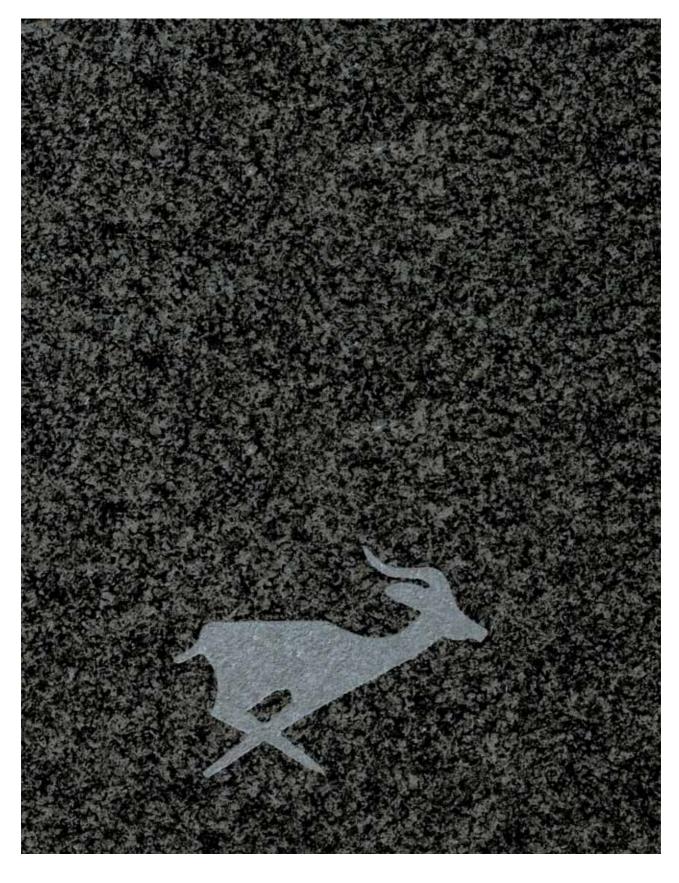


NERO IMPALA® MEDIUM





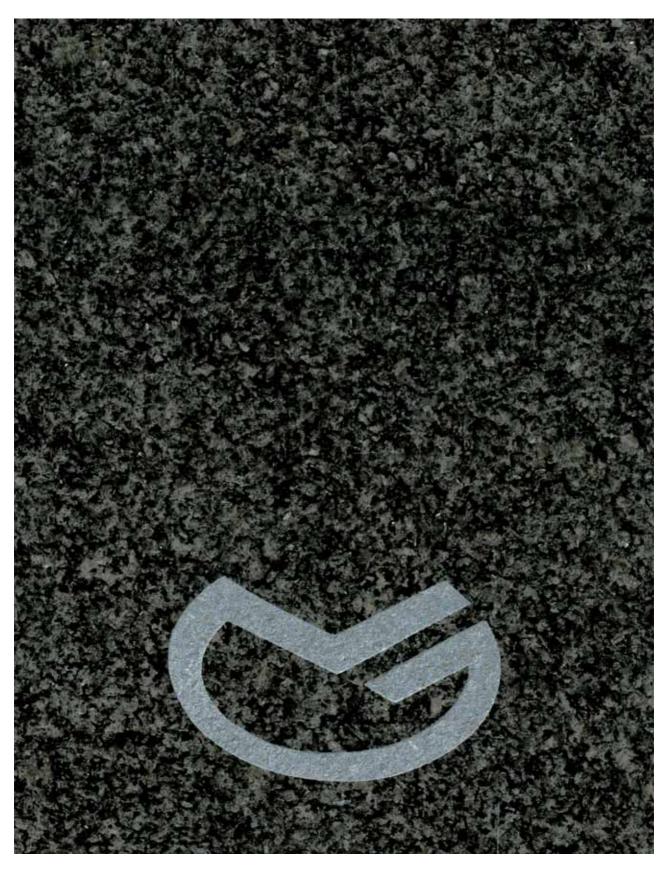
NERO IMPALA® LIGHT



N E R O A F R I C A



WONDERKOP



N E R O A F R I C A



ELANDSFONTEIN



N E R O A F R I C A



BERSEBA



N E R O I M P A L A®



TOTAL PRODUCTION

Total production of Nero Impala® and Nero Africa, spread over a distance of 70 kms running east to west between the towns of Rustenburg and Brits, is presently estimated at 140 000m³ per annum. Of this, the Marlin Group produces 70 500m³ per annum (63 500m³ Nero Impala® and 7 000m³ Nero Africa) and Kelgran produces 52 000m³ per annum. This results in Marlin together with its joint venture interest in Kelgran producing 87% of the total production of Nero Impala® and Nero Africa from the region and being able to offer over 77% of the total available production of classical Nero Impala®.

The remaining smaller producers account for the balance of 13% of total production with a collective annual production of less than 20 000m³. It is important to note that other smaller producers quarry outside of the Nero Impala® zone and that the material quarried, although similar to Nero Impala®, has a different grain structure, colour and appearance.

The longer term quarry development policies implemented in the past mainly by the Marlin Group and RED Graniti and currently in progress at Kelgran will allow these companies to increase their current production levels by between 40%-60% at relatively short notice to match positive market trends.

Production capability of Nero Impala® and Nero Africa material can be summarised as follows:

COMPANY	QUARRY	MATERIAL	PRODUCTION
Marlin	Marikana	Nero Impala®	16 000m³ per annum
Marlin	Minaco	Nero Impala®	12 000m³ per annum
Marlin	Springbok	Nero Impala®	30 000m³ per annum
Marlin	Taylor's	Nero Impala®	2 500m³ per annum
Marlin	Nell's	Nero Impala®	3 000m³ per annum
Marlin	Wonderkop	Nero Africa	3 000m³ per annum
Marlin	Elandsfontein	Nero Africa	1 500m³ per annum
Marlin	Berseba	Nero Africa	2 500m³ per annum
Kelgran	RID9	Nero Impala®	17 600m³ per annum
Kelgran	Tlapa 1	Nero Impala®	6 500m³ per annum
Kelgran	Tlapa 3	Nero Impala®	8 950m³ per annum
Kelgran	IN1 + IN3 Transvaal	Nero Impala®	8 950m³ per annum
Kelgran	IN2 Transvaal	Nero Impala®	10 000m³ per annum





TECHNICAL SPECIFICATIONS

Nero Impala® is suitable for both interior and exterior applications due to its unique physical properties which render it extremely durable and easy to maintain.

Being an extremely consistent, durable stone, Nero Impala® is resistant to extreme high and low temperatures, wear and tear, pollution, water and stains.

GEOLOGICAL DATA

Material trade name Nero Impala®

Other commercial names Nero Africa, Rustenburg

Country of origin South Africa

Location East of Rustenburg, North West Province

Geological classification Gabbro-norite

Lithostratigraphic unit Rustenburg Layered Suite of the Bushveld Igneous Complex

of grey and black minerals

Microscopic description Primary minerals:

Plagioclase (64%), orthopyroxene (30%), clinopyroxene (4%)

Secondary minerals:

Amphibole (<1%), chlorite (<1%), sericite (<1%), talc (<1%)

Grain size Medium - 5mm to 10mm

Texture Granular

TECHNICAL DATA					
4	Compressive strength	Мра	240	ASTM C170-90	
	Flexural strength	Мра	22	ASTM C880-98	
1	Modulus of rupture	Мра	26	ASTM C99-87	
0	Abrasion resistance (wear)	mm	1,48	ASTM C241-90	
1 kg	Bulk specific gravity	Kg per m³	2,930	ASTM C97-02	
MM	Coefficient of thermal expansion	Mm per °C	9,07 x 10 ⁻⁶	ASTM D4535-85	
::	Porosity	% per mm	0,34	BRE Standard	
****	Water absorption	%	0,10	ASTM C97-02	







Dorking AG is the exclusive worldwide distributor of Nero Impala® and Nero Africa
Tel: +41 55 417 3333 ■ Fax: +41 55 417 3330 ■ E-mail: info@e-dorking.com

Marlin and Dorking AG are members of the Finstone Group

