



The house and stone

Traditional but so contemporary... Wallonia is an exceptional location for natural stone. Alternatively bathed or submerged by the warm waters of the primary era, shores and sea bottoms accumulated considerably thick layers of sediments and those sediments were subsequently churned and disrupted by the movements of the Earth's crust. That is how limestone and marbles were born, together with extremely varied siliceous rocks, sandstone and schistose sandstone, slate, arkose or quartzite. Every year, no less than fifteen or so varieties, still quarried today, supply about ten million tonnes of worked materials destined for Belgium or abroad : rubblestone, floor tiles and cobblestones for the most part.

For centuries, the architecture of our regions has taken advantage of this very enviable position. Manor houses, mansions, castles and religious buildings, to a lesser extent, rural houses and farms, have made the most of that godsend, both for outdoor masonry and openings and for interior decoration. Today, stone has not changed : its use by man has been an unconscious contribution to sustainable development for centuries.

If stone is the same, the present-day house, by contrast, has changed a great deal. Saving energy has become a priority and "passive" houses are taking root. In this changing context, stone continues to be used in such places as walls, window and door surrounds, floors, stairs and sometimes even roofs. Resistant to wear and withstanding the passage of time, its thermal inertia has an impact on energy saving potential and its infinite range of textures and shades of colour wins over the most demanding builders. This notebook is an invitation to many of them, who have been the finest reflection of its brand image for two decades.



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## THE ROOF

## Stones from Wallonia

Wallonia hosts a vast and varied pallet of quarried stones. It is advisable to make inquiries about suitability and availability directly with the producers if you are envisioning any specific use.



FONTENOILLE SANDY LIMESTONE Cleaved rubble stone



GOBERTANGE SANDY LIMESTONE Chiseled



CONDROZ SANDSTONE Cleaved rubble stone



CONDROZ SANDSTONE Cleaved rubble stone



ARKOISE Cleaved rubble stone



QUARTZITE Cleaved rubble stone



SCHISTOSE SANDSTONE Cleaved rubble stone



SCHISTOSE SANDSTONE Cleaved rubble stone



SCHISTOSE SANDSTONE Cleaved rubble stone



SCHISTOSE SANDSTONE Cleaved rubble stone



SCHIST Cleaved rubble stone

## Stones from Wallonia

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BLUE LIMESTONE Crusted



BLUE LIMESTONE Bush-hammered



BLUE LIMESTONE Bush-hammered



VINALMONT MEUSE LIMESTONE Old cut



BLUE LIMESTONE Ice flowers



BLUE LIMESTONE Flamed



BLUE LIMESTONE Aged



BOCQ BLUE LIMESTONE Chiseled



LONGPRÉ MEUSE LIMESTONE Chiseled



TOURNAI STONE Chiseled



DINANT BLACK MARBLE Split



COLOURED MARBLE Griotte honed



# THE WALL

Wall : A vertical construction, with a length and height much greater than its thickness, used to enclose a space, shore and retain earth, form the sides or the divisions of a building and support its upper floors.

# MASONRY

The simple stonework wall made of dressed rubblestone has given way today to more complex structures. Nevertheless, the traditional stone wall has not disappeared, neither in rural settings where it blends in perfectly with the enclosing landscapes nor in towns where it inspires stability, suggests energy and remains timeless to say the least.

1 | 2  
3



1. This wall made of Fontenoille sandy limestone, rehewn on the spot, ensures a transition between indoors and outdoors: it provides support for the very open space of this house.

**CHINY | DESIGNED BY ARTAU ARCHITECTURES**

2. Stonework structure built from large stone blocks – in this case, solid arkose – is, in some sense, an architectural challenge.

**AMEL | DESIGNED BY ARCHITECT YVES DELHEZ**

3. Indoors, the stone wall affords intimacy and conviviality. The blue limestone, even dark blue, proves useful in creating protective atmospheres. In this shop, the accurately dressed rubblestones are laid slightly offset so giving relief and recalling the framework of traditional walls.

**PARIS (F) | DESIGNED BY GILLES & BOISSIER ARCHITECTURE D'INTÉRIEUR**



4. When the sun hangs low, Vinalmont limestone, usually pale grey in appearance, translates its colours into beige ochre shades. The colour of each natural stone is very changeable and varies according to the light of day, its condition – whether it is dry or wet – or the colour of the mortar joint.

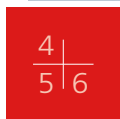
**GRÂCE-HOLOGNE | DESIGNED BY CABINET D'ARCHITECTURE p.HD**

5. Through its dark colour, in shades of brown and blue verging on black, or even violet, slate completes the colour chart of the stones of Wallonia. The process of obtaining a homogeneous colour, as in this specific case, often begins at the quarry and involves sorting the stones.

**MARTELANGE | DESIGNED BY PIERRE HEBBELINCK ATELIER D'ARCHITECTURE**

6. Depending on the quarries from which it is extracted, schistose sandstone confers shades of brown, green-brown, rust, but also red or almost black.

**ROCHEHAUT | DESIGNED BY ARCHITECTEN EMMANUEL LENDERS EN PARTNERS**

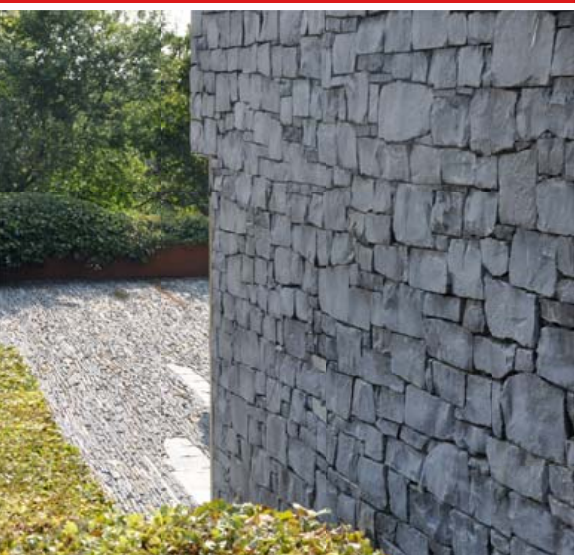


PROJECT | **THE GUARDIAN SPIRIT STONE**



As if wrapped in tall limestone masonry, this house designed by Philippe Valentiny is protected on one side and opens wide onto the landscape on the other. The stone breathes a tranquil power into it, as a token of indoor intimacy, or even simplicity and serenity in the bright grey and white camaieu tones of the rooms or in the Japanese inspired garden-patio. The careful work, requiring bonding where carefully re-hewn rubblestone seems to be assembled without a joint, also leaves room for geological landscapes emerging from the creativity of a stone artist.

BATTICE | DESIGNED BY VALENTINY ARCHITECTES





# CLADDING

Current building techniques give priority to concrete masonry or wooden frameworks. Stone can cover such structures and then mainly play an aesthetic role in addition to protecting structures against lashing rain. Techniques differ with the use of thin stones fixed on a continuous backing material – concrete or permanent formwork on wooden lintels – or a thin masonry cavity wall for supporting its own weight.



1 | 2  
3 |



Cladding : Stone cladding is a thin surface layer of dressed stone applied to the inside or outside of a house and form part of the wall thickness. Cladding is used to consolidate, protect or decorate.

Facing :

- a) Outer surface of a structure or a wall, composed of cladding, usually cut and dressed stone cladding.
- b) Surface of a stone that must appear on the outer side of the wall.

1. 5-centimetre thick, blue limestone facing tiles, in a "scoured" finish, are fixed to the wall by mechanical fasteners in the three dimensions which take up the weight of each element.

**KNOKKE | DESIGNED BY JOËL CLAISSE ARCHITECTURES**

2. The roughness of the blue limestone crust lends the appearance of perfectly squared, large blocks. And yet they are only 10-centimetre thick facing tiles, fixed without a joint to metal brackets.

**LILLE (F) | DESIGNED BY ARCHITECTES ASSOCIÉS MEAS – WINDELS – QUATR'A – COUTURON**

3. Upside down : the slightly irregular, blue limestone crust tiles are fastened vertically through a stainless-steel system.

**BRUSSELS | DESIGNED BY A2RC ARCHITECTS ET ARTER**



4. This sandstone rubble facing – where the stones have been cut up to obtain thicknesses between 3 and 5 cm – was laid without joints with a flexible adhesive cement to obtain this wall emphasising the relief. The top lighting accentuates the rough effect of the cleaved stone and strengthens the natural texture of the stone.

**SPRIMONT | DESIGNED BY BUREAU AUDEX**

5. The alliance between these two natural elements, stone – in this case, Vinalmont limestone – and wood is always a token of success; their complementarity of colours and textures, their symbiosis within the very concept of Nature make this combination the archetype house. The stone facing is slightly offset from the supporting block by an appropriate structure and becomes a protective casing.

**EMBOURG | DESIGNED BY BASTIN-COLLIN ARCHITECTES**

6. Graphic effect for this stone façade, broached according to a very graphic pattern. The façade actually only serves an aesthetic purpose. It is placed in front of the real façade and contributes to making it less commonplace.

**KORTRIJK | DESIGNED BY ARCHITEC**

7. In damp rooms, stone naturally finds its place. Limestone offers an extensive range of non-slip finishes.

**ANTWERP | DESIGNED BY REYNDERS**





# BASEMENT

Basements today are no longer popular. Or rather they are no longer as useful as they used to be. The progress made in wall/ground watertightness has changed building standards that now do without this intermediate wall. Aesthetics have finally forgotten basements for the benefit of façade uniformity, more in tune with an architecture advocating simplicity of shapes. And yet this low wall does not only have detractors.

1. Basement or pedestal? Connecting two land levels, with a reference to Nature at the foot of the building to contrast with the graphic façades made of solid cedar laminate: the light beige arkose rubblestones light up this first level and warm the shade of the projecting part.

**WALHORN | DESIGNED BY ATELIER WEIHERHOF**

2. Basement effect on this restoration of an old farm. The big blocks of blue limestone crust, in colour harmony with the ties and the surrounds of the porch, but also with the pool deck, form a transition between two architectures from different periods. This blue limestone crust is used at the bottom of new brick walls and recalls the former black tarring that was a feature of many houses in Walloon Brabant.

**ITTRE | DESIGNED BY JEAN DELOGNE LANDSCAPING**

3. Two different finishes for these blue limestone facing tiles that materialise the actual wall and the basement. The dark finish of the wall is a “honed” finish. The finish of the bottom of the wall is “milled”. It is worth noticing the downpipe integrated into the wall and then taken discreetly into the supporting part.

**LIÈGE | DESIGNED BY DETHIER ARCHITECTURE**

4. Protective effect of large slate slabs squared at the quarry for a wall covered with a wooden facing.

**PALISEUL | DESIGNED BY HUGHES FERNET – LE BOUILLON BLANC**



Basement or base or substructure: Lower part of a building built on the foundations, generally solid and supporting the rest of the structure. It is also a continuous base running, in particular, along the base of a façade. Course or bottom or foundation of a building, of a bearing element (wall, pillar, column).

# STRIPES

From time immemorial, building a stone wall means laying a course of rubblestones one above the other, with each course being separated by a layer of mortar. At the end of a day's work, it is covered over following a usually almost perfect horizontal line. Once the wall has been built, each day's work can easily be detected. Some contemporary walls re-use this graphic theme, in different ways.



1. Strips of large arkose rubblestones have been distinctly enhanced by a hollower joint that visually separates them. The perspective of the long façade only accentuates the effect.  
**ROBERTVILLE | DESIGNED BY DETHIER ARCHITECTURE**
2. Sequences of irregularly separated lines are engraved in wall cladding made of large blue limestone slabs and thereby minimise the visual impact of a too regular joint.  
**PARIS (F) | DESIGNED BY MILLET CHABEUR ARCHITECTES**
3. In an entrance, a pattern of horizontal stripes is made by the alternation of floor tiles with a chiselled finish and strips cut more deeply in the same direction.  
**BRUSSELS | DESIGNED BY JOURDAIN ARCHITECTES ASSOCIÉS**
4. Emphasising the effect of narrowness of this stair, the cleaved blue limestone chosen in three thicknesses are laid to give two walls as if they were grooved horizontally.  
**HOBOKEN | DESIGNED BY LLOX ARCHITECTEN**

# DETAILS

Natural stone – and especially limestone – is a material that can be used boldly. Stone can be dressed to the required shape, cut out, engraved, carved... or even painted to rectify the lack of homogeneity of old walls.



1. Uniform façades do not go well with traditional and often inelegant accessories – ventilation flaps, manholes, covers, etc. Here is an ingenious ventilation opening cut out of the natural stone, which goes unnoticed in the middle of a wall of cleaved, blue limestone rubblestones.

**BRUSSELS | DESIGNED BY JÖEL CLAISSE ARCHITECTURES**

2. A name soberly engraved on the jamb of a door shows how a detail offers another dimension to stone.

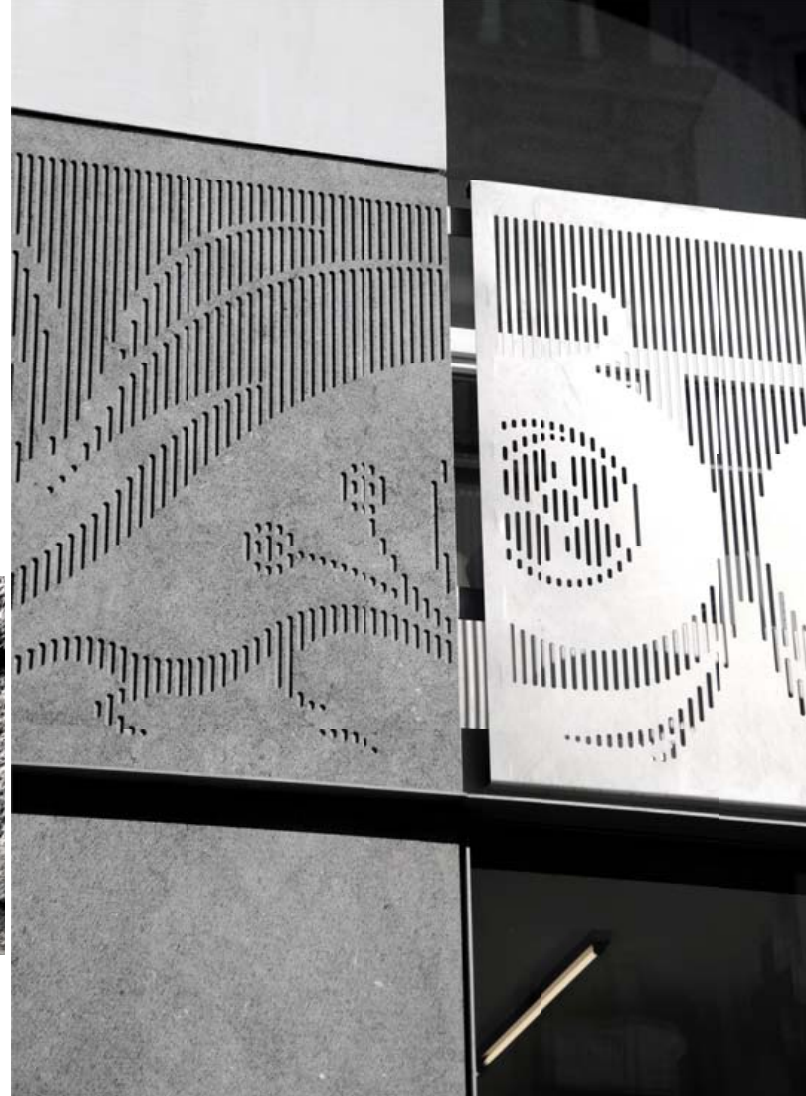
**LURE (F) | SCULPTOR MAXIMILIEN VOX**

3. Stone and steel ornamentation, with the two materials placed side by side to form a pattern that links together. The stone is finely cut out with pressurised water.

**LIÈGE | DESIGNED BY OLIVIER FOURNEAU ARCHITECTES**

4. The artist has worked the blue limestone as if it could be modelled into organic shapes, very far from the fractures of the original material. In this way, he creates slender panels that can decorate a wall or even play an architectural role as solid balustrades.

**BRUSSELS | DESIGNED BY BENOÎT LUYCKX, SCULPTOR**





The bay: Alcove or recess made in a wall, archway, door, window, etc., whether closed or not.

# THE BAY

# SURROUND

Traditional regional architecture of Wallonia was marked by the Mosan Renaissance style, which draws its inspiration from mediaeval half-timbering and incorporates limestone as the main component of façades with brick. Ornamental features, such as alternating lines of brick and stone but above all stone window surrounds, strongly influenced the design of façades during the following centuries. Today, that very formal surround has given way to many versions and varieties where stone remains a prominent feature.



Surround : Which surrounds an opening (door, window, etc.).

1 | 2  
3 |



1. In the past, stone surrounds were sometimes hastily bush-hammered to be able to be painted afterwards. For this façade of an old Brabant farm, this pitting technique with points has been updated while keeping the white-painted wall brick.

ITTRE

2. The very fine blue limestone surround modernises this architectural feature and fits gracefully into a high façade made of sandstone rubble.

TILFF | DESIGNED BY BUREAU D'ARCHITECTURE ET D'URBANISME DOMINIQUE HARDY

3. Asymmetry between the jutting lintel made of schistose sandstone, integrated into the wall made with the same stonework, and the blue limestone slip sill which punctuates the bay.

XHOFFRAIX | DESIGNED BY LUC NELLES ARCHITECTES ASSOCIÉS



4. Now only the lintel and the window sill remain of this surround. They are subtly offset in relation to the axis of the window and thereby blend into the rhythmic arrangement of the slate stonework on this façade.

**MARTELANGE | DESIGNED BY PIERRE HEBBELINCK ATELIER D'ARCHITECTURE**

5. Only sills are marked by the use of blue limestone that makes a strong contrast on the solid sandstone façade. The openings along the edge of the façade conjure up the streamline moderne architecture of the thirties.

**WAIMES | DESIGNED BY BUREAU D'ARCHITECTURE POM**





# LOOPHOLE

If the warlike objective of the loophole is no longer really appropriate today, people still make good use of it to structure a façade on the outside or to allow fine rays of light to filter inside.



Loophole: Opening or gap in a defensive wall for observation purposes or for launching projectiles.



1. Like a vertical groove in the red marble wall, this slender ventilation slit is enough to bring life to this blind façade.

**VODELÉE | DESIGNED BY ARCHITECT JOS DELBROECK**

2. In this organic building where the straight line is intentionally absent, this loophole emphasises the shadow of a recess.

**DOLHAIN | DESIGNED BY ARCHITECT YVES DELHEZ**

3. The contemporary extension of buildings from another century with other decorative features sets every architect the problem of creating the link. These false loopholes, mere cut-outs in the stone emphasised by a false dark shadow, continue, like an anamorphosis, the rhythm of the bays viewed in perspective.

**LIÈGE | DESIGNED BY DETHIER ARCHITECTURE**

1 | 1  
2 | 3



# ARCH

If arches can still be found on the façades of barns, the arch is an almost forgotten architectural form since it looks so out of place among the clean and formal lines of present-day architecture. And yet people may delight in rediscovering it.

Arch: Refers to any assembly of stone, rubblestone (or brick) intended to cross a more or less wide space by means of a curve (or through the meeting of two curved elements), resting on two supporting points, and intended to span a bay, an opening or a distance inside a solid masonry wall (blind arch).



1  
2  
3



1. Nonconformity for this garage and the coloured surrounds of its doors which rest on two arches made of arkose rubblestone.  
**EUPEN | DESIGNED BY ARCHITECT YVES DELHEZ**
2. Refurbishment of a square farm in the Liège area; the arch that formed the surrounds of a barn door has been restored in Belgian blue limestone and converted into an entrance by adding a wide semicircular arch window, offset in relation to the plane of the façade.  
**ANS | DESIGNED BY ATELIER D'ARCHITECTURE LOUIS & ROYER**
3. Complementarity of the arkose used for the façade and the slate inserted between the piers to conceal the intermediate floor.  
**BOTRANGE | DESIGNED BY ARCHITECT JEAN ENGLEBERT**

PROJECT | WILD STONE



This metamorphosis of an old Ardennes farm took place around stone. The farm is located in a village where schistose sandstone and sandstone are omnipresent. Built against a steep cliff, it was formed from two neighbouring buildings installed in a corner, near a path away from the centre of the village. The architect Dirk Coopman converted it into holiday accommodation using stone as a leitmotiv. The inside walls were laid bare and reworked with lime, the openings of the old barn were refurbished while keeping the existing stone surrounds and the farm was extended towards the cliff, which now integrates into the house. Stone was constantly used in the outdoor design, especially for a barbecue area combined with a pool supplied with water from the stream flowing alongside the property.

REDU | DESIGNED BY ARCHITECTENBUREAU DIRK COOPMAN



# OPENING

When the surrounds have completely disappeared, the opening looks as if it has been made in the actual stone wall. That is notably the case with stonework facing. But the opening can be even more radical.



1. Minimalist openings in arkose masonry: these large glass blocks – of the thickness of the wall – are inserted like rubblestone and spread coloured light throughout the stair well.

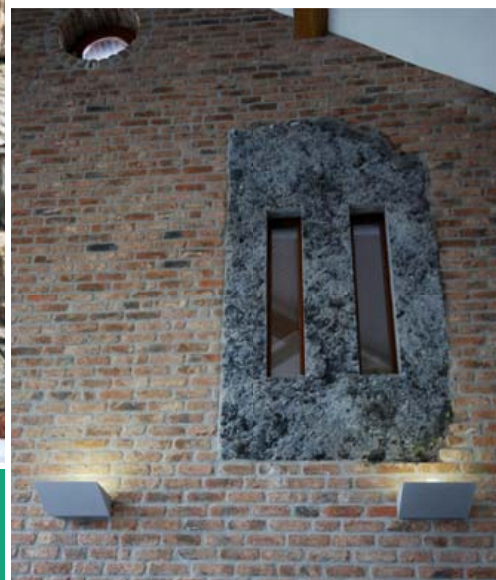
**BOTRANGE | DESIGNED BY ARCHITECT JEAN ENGLEBERT**

2. Cleanness of lines for this door inserted into arkose masonry.

**HASSELT | DESIGNED BY GROEP DELTA ARCHITECTUUR**

3. Two slender openings have been made in this large blue limestone slab, integrated into an interior brick wall. They provide a view onto a huge games and sports hall.

**SILLY | DESIGNED BY BUREAU COUPEZ & ASSOCIÉS ARCHITECTES**



1  
2 | 3



4. The cleaved blue limestone rubblestones are laid while leaving tiny openings on this inner patio; a way of seeing without being seen and offering a beautiful way for the evening light to enter.

**HOBOKEN | DESIGNED BY LLOX ARCHITECTEN**

5. To emphasise the new bays created in this old façade, the architect chose to surround them on the inside with Corten steel strips.

**GESVES | DESIGNED BY BUREAU COUPEZ & ASSOCIÉS ARCHITECTES**

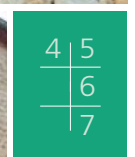
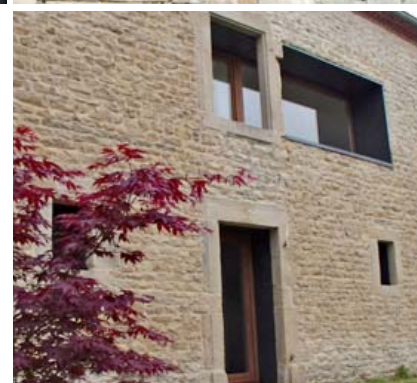


6. Window opening on sandstone facing: the surrounds are emphasised by narrow, vertical wooden lines, recalling the frame and the sliding shutter. The lintel and the sill are made of zinc.

**JALHAY | DESIGNED BY OLIVIER FOURNEAU ARCHITECTES**

7. This bay enlargement in the façade of an old barn conceals unexpected architectural work: all the walls were kept but the low-energy wooden framework of residential accommodation slipped inside. A new opening was cut out of the stone-faced, sandy limestone wall, and its thickness was protected by laminated wood panels to avoid water seepage. In this way, the windows are offset towards the inside of this "skin", which reduces the radiant heat of the sun in summer.

**HABAY-LA-NEUVE | DESIGNED BY CRAHAY & JAMAIGNE ARCHITECTES**



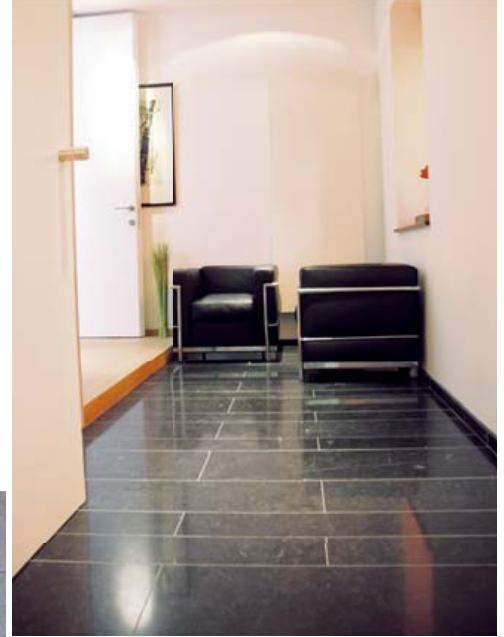


# FLOORS

Floor: A generally flat and horizontal surface arranged in a living or pedestrian traffic area or forming the inner lower surface of a flat, a vehicle, etc.

# TILE

The floor is the surface where stone can lend itself to an infinite number of compositions, ranges of colours and shapes. Large floor tiles or flagstones are often first choice; they are soft to the feet, especially when underfloor heating is installed and make people forget the frosty winters while being such a pleasant source of freshness in summer.



Tile: A flat thin slab of stone or hard material, used to cover floors, to face walls and to cover sloping roofs or terraces, etc.



1 | 2  
3 | 4



1. The elegance of a tiled floor is often due to the thickness of its joints. The finer they are, the greater the emphasis on the stone emerging from the overall aspect, while the joint becomes almost invisible. In this case, the Vinalmont limestone tiles are laid in strips of unequal width. The final effect looks softer and more natural.

**EMBOURG | DESIGNED BY BASTIN-COLLIN ARCHITECTES**

2. Conventional floor laying with alternating joints for these large blue limestone tiles with a "dark honed" finish.

**FLOBECQ | DESIGNED BY LAURENT VERMEERSCH ARCHITECTES**

3. Limestone, and blue limestone in this case, is known for its excellent durability and requires little upkeep. It can be integrated into areas where people would least expect it. Here, it is used with a blue flamed finish as the floor of a lift composed of 2 cm thick tiles.

**ANTWERP | DESIGNED BY ARCHITECTENBUREAU JEF VANOEVELEN**

4. Carpet effect for this floor combining two blue limestone finishes: a layout of pieces of different widths with a "rough sawn" finish surrounded by more classical floor tiling and a "dark honed" finish'.





5 | 6  
7 |

5. Unusual line effects and an intentionally light and wide joint for floor tiling that does not attempt to hide away but rather to intersect with other sets of lines.

6. The tiling of this kitchen floor is practical and easy to clean and most suitable for a very busy room.

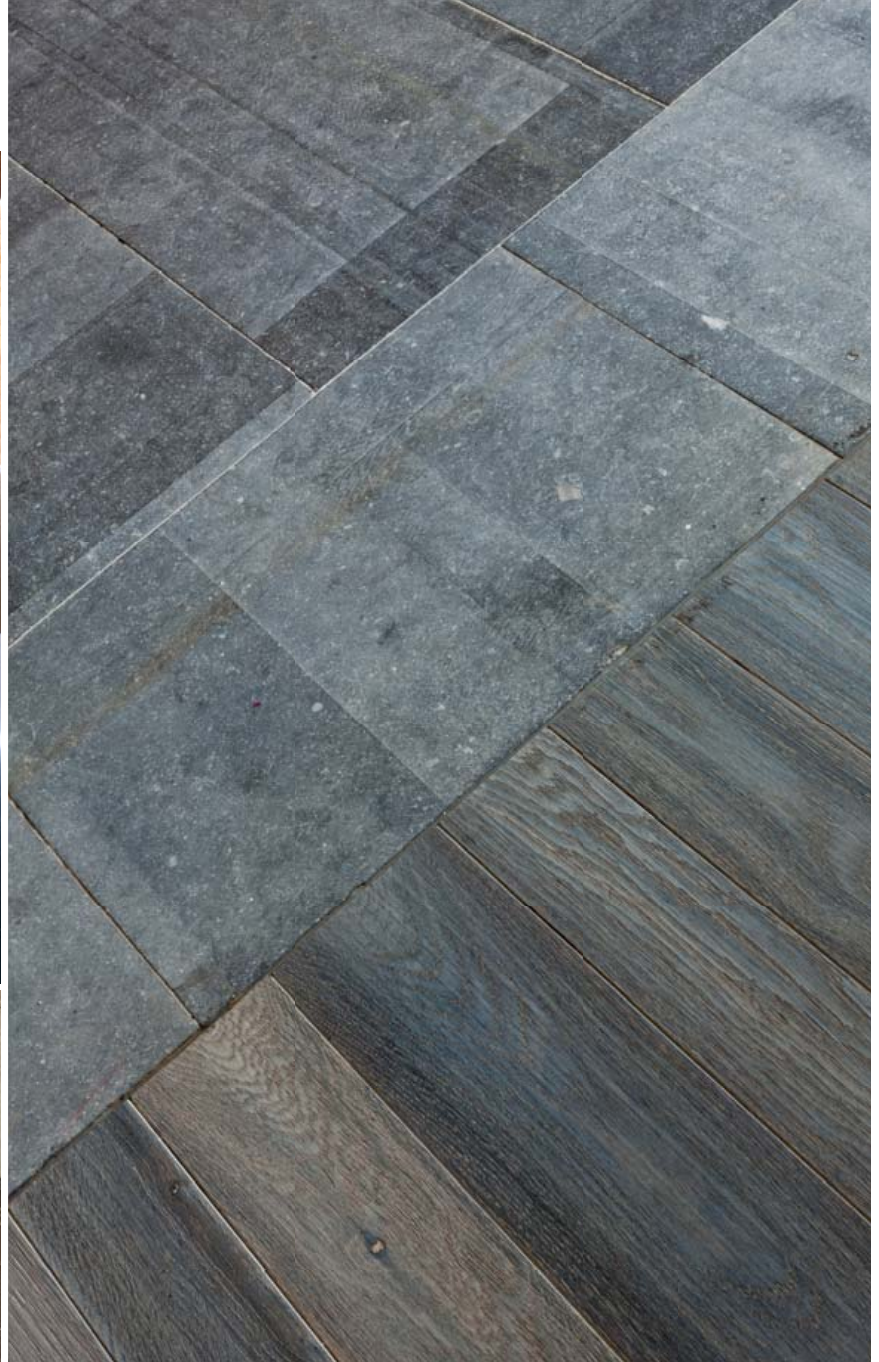
BRUSSELS | DESIGNED BY ARCHITECT VINCENT DEGRUNE



7. This "polished" Longpré limestone brings a very dark note, comparable to some marbles.

BRUSSELS | DESIGNED BY BUREAU D'ARCHITECTURE  
MARC CORBAIU





8 | 9  
10 |

8. Frieze engraved in a series of floor tiles.

SOIGNIES | DESIGNED BY ÉTIENNE BINARD, ARTIST BENOÎT LUYCKX

9. Subtle alliance of tones between blue limestone and dark wood.

LIÈGE | DESIGNED BY ALTIPLAN\*ARCHITECTS

10. Criss-crossed pattern obtained by a limited number of different-sized floor tiles.

ARLON | DESIGNED BY AUDEX ARCHITECTURE

# OPUS

“Opus incertum” refers to a random arrangement of tiles or flagstones and “opus romano” refers to the bonding of orthogonal tiles or flagstones. The word “opus” can cover an infinite number of patterns and styles. On the floor, the search for the ideal joint layout and pattern involves various elements: the selected stone – whether it can be dressed or not – the ease with which the stone can be bonded and arranged, a decisive factor on which the final price of the floor covering depends, and the aesthetics sought by the design objective of the room or building... Indoors, comfort is the priority, combined with aesthetic considerations.



1. Preparing a layout drawing beforehand is impossible in an arrangement of irregular delivered tiles. The stone tiles are laid on the spot and success depends on the way the layer is going to play with his “pieces”. Even while searching for the best possible assembly, the joints risk being thick. The layer is required to cut some off-cuts again to obtain finer joints.

OVERIJSE | DESIGNED BY EER ARCHITECTURAL DESIGN



2. A previous joint layout drawing has been made showing the entire floor covering. No tile is alike and cutting accuracy allows very narrow, almost invisible, jointing. The sawing marks on the stone leave this informal layout scope for expression.

GENVAL | DESIGNED BY EER ARCHITECTURAL DESIGN

3. In the space close to the house, rough flagstones blend perfectly into the natural spirit of the place.

BRUSSELS | DESIGNED BY MICHEL FAMERÉE

Opus: Followed by a qualifier refers to a way of arranging and bonding materials in masonry and, by extension, in floor tiling.



1 | 2  
| 3



1. Why not pave a living room? These sandstone cobblestones are proof that small sizes can harmonise with a living area in a way that is unexpected as it is successful.

**MALMEDY | DESIGNED BY A.M.D. ARCHITECTURE**

2. The chequered effect of small red-marble floor tiles put rhythm into a floor.

3. Stone flooring for thin tiles that make it possible to reconcile easy laying and classical effect.

**LIÈGE | DESIGNED BY ALTIPLAN°ARCHITECTS**



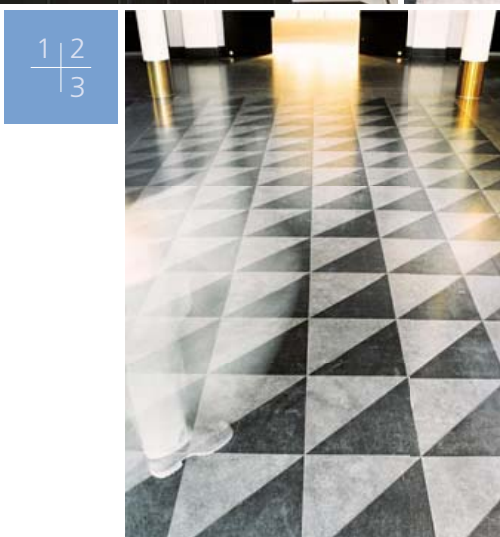
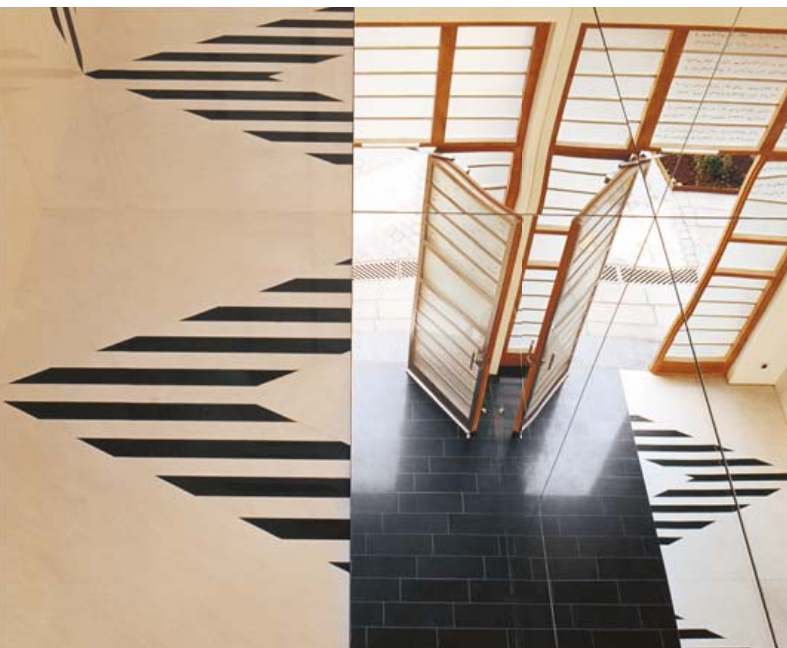
1 | 2  
— | —  
3

# SMALL SIZES

Small-sized tiles, cobblestones, skirting... The stones – limestone, sandstone, schistose sandstone, slate – can be cut into small-sized elements, totally suited to confined surface areas or natural aesthetics.

# TWO-TONE

Timeless, the assembly of tiles of two different colours and often of highly contrasting tones – black and white is the most widespread expression of this – has not aged a bit. Draughtboard floors appear in the iconography of the 15<sup>th</sup> century, but the origins of the pattern go back to about 1500 BC. A technical feat, an exercise in perspective, an evocation of ancient Rome, a luxury or a symbol of balance and harmony, graphic chequered tiling travelled through fashions to make a strong comeback at the end of the 20<sup>th</sup> century, particularly thanks to the French decorator Andrée Putman.



1 | 2  
— | —  
3

1. An optical effect for this spectacular entrance floor designed by Daniel Buren, marked by a powerful graphic style, associating the white of Carrara marble and the pure black of the Belgian marble of Golzinne.  
**LIÈGE | DESIGNED BY CHARLES VANDENHOVE & ASSOCIÉS**
2. Blue limestone tiling is complemented by white ceramic tiles, according to a very simple joint layout drawing, to create a very graphic floor.  
**LOUVAIN-LA-NEUVE | DESIGNED BY ARCHITECT FRANÇOIS DE SMET**
3. Light grey Vinalmont limestone and black marble play the pair for this slightly contrasting tiling.  
**NAMUR | DESIGNED BY ATELIER D'ARCHITECTURE THIERRY LANOTTE**

# STAIRWAYS

Stairways: A flight of steps leading from one level to another.



Between seen and unseen, between social and intimate, the stairway is a complex structure that seldom gives much away. Often integrated into the wall that supports it, it can also be a self-supporting assembly independent of the structural works. Straight, winding or corkscrew, spiral, curved or angled, the stairway adjusts to situations... and to stone!

# STRAIGHT

Backed onto a wall, the stairway is the simplest form of this architectural feature and often focuses attention. It has known how to go the way of modernity.



1. In its solid version, this stairway is made of schistose sandstone, a stone more often used in masonry but which, in this case, shows its know-how and cannot fail to convince many people!

**XHOFFRAIX | DESIGNED BY LUC NELLES ARCHITECTES ASSOCIÉS**

2. Dark in colour, but light in appearance, airy and mysterious, it is of the generation that wanted to break free from restrictions and overcome gravity. And yet the stone is solid blue limestone with a "dark honed" finish.

**BLANDEN | DESIGNED BY ARCHITECT JOS DELBROECK**



1 | 2



3 | 4  
| 5



3. Designed with lightness, the stairs are built without risers. The solid step is fixed to the wall and to a metal stringer. The first step is actually a vast threshold covered with blue limestone.

ANTWERP | DESIGNED BY FRANÇOIS MARCQ ARCHITECTURE D'INTÉRIEUR

4. Staircase built only into the side of a wall. The blue limestone steps with a dark honed finish are held by a tiny riser.

GISTEL | DESIGNED BY ARCHITECT EDDY DEBOYSER

5. Same "open and solid" spirit for a threshold of four solid steps so connecting the stairway to the very dark, blue limestone tiling.

GISTEL | DESIGNED BY VERLY & VANDECASTEEL ARCHITECTENTEAM







6. Refurbishment of a stairway using old solid steps recovered from an old building.  
**AYWIERS | DESIGNED BY BUREAU COUPEZ & ASSOCIÉS ARCHITECTES**

7. Steps built with sandstone, integrated into two walls built with the same stone.  
This stairway, leading to a wine cellar, calls for traditional laying and thereby recalls old cellars devoted to the care of wine-growing heritage.  
**MALMEDY | DESIGNED BY A.M.D. ARCHITECTURE**

8. Sequence of a group of a few steps made with a blue limestone thin elements.  
The very slender skirting, laid only on the intermediate threshold, does not catch the eye.  
**MERELBEKE | DESIGNED BY ARCHITECT PETER DONCK**



6 | 7 | 8



1. An arched staircase. This traditional technique, used for the building of winding staircases, makes use of hollow bricks, roughcast with plaster. The steps and risers made of blue limestone, cut to size, are installed one by one starting from the bottom; the craftsman climbs on his structure as it is gradually being built. The staircase obtained in this way is self-supporting.

**MONS | DESIGNED BY AGORA MICHEL DUQUAINE,  
CRAFTSMAN JEAN PAUL FOUCHER**

2. A blue limestone spiral staircase installed in a stringer that acts as a balustrade.

**OLNE | DESIGNED BY ATELIER CONCEPT**



# WINDING

Whether spiral, corkscrew or curved, the winding stairway can break free from walls; it is therefore easy to install it wherever you wish. Adopted by modern architecture, for that quality, it covers itself with stone to assert its aesthetic and practical side.

# DOORSTEPS

You often need to climb a few steps to enter a house. Doorsteps provide the transition between living and street level, but they are also a means of protection or act as an intermediate level. The few steps have a very special part to play and their role is to bring together.



1  
2

1. Carefully designed angular steps so that the joints are not aligned.

**BRUSSELS | DESIGNED BY JEAN DELOGNE LANDSCAPING**

2. Three steps treated in a traditional way but where the curve is uppermost.

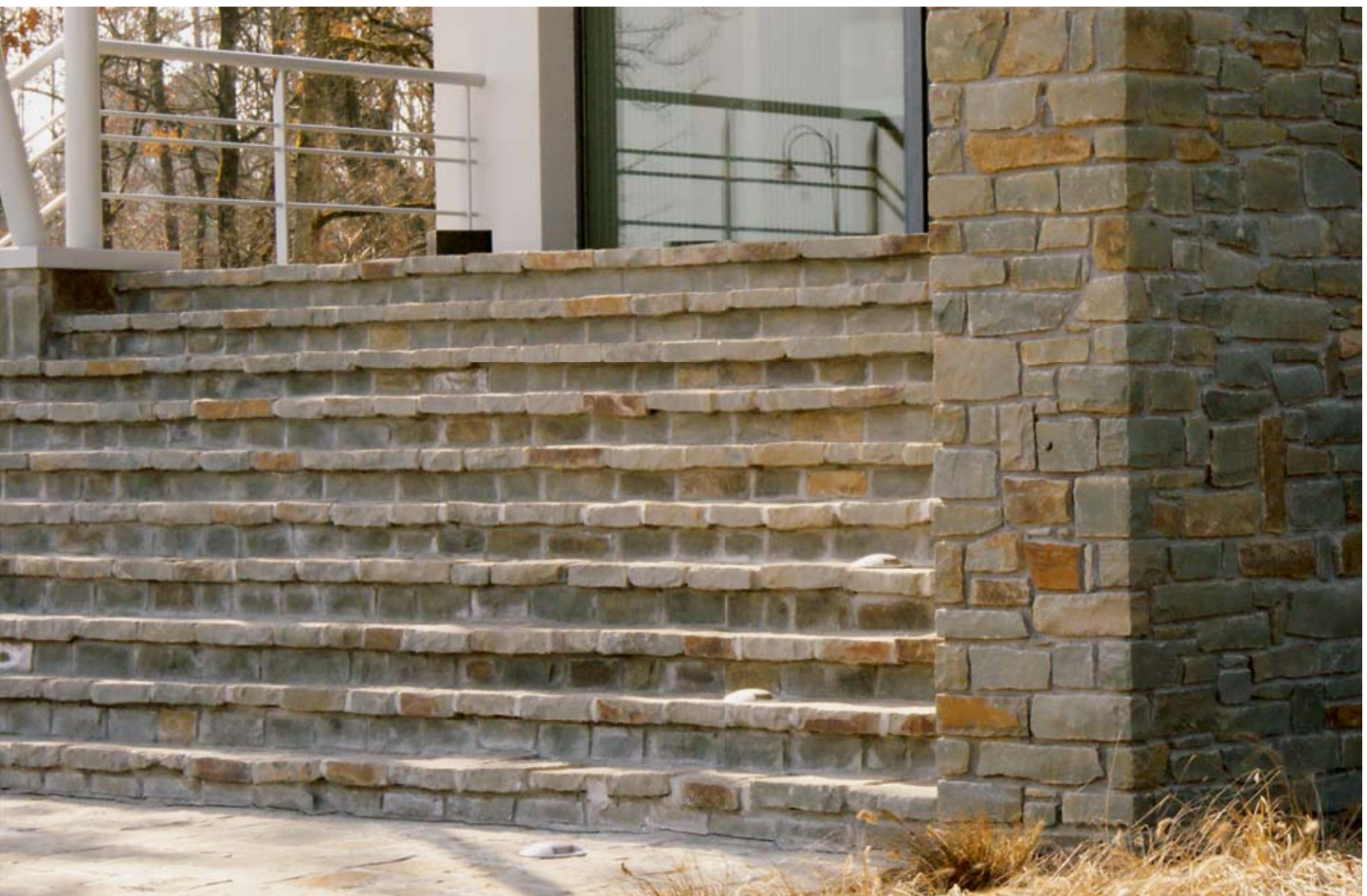
**NALINNES | DESIGNED BY ARCHITECT MARCEL BARATTUCCI**



3 | 4  
5 |



3. A few thick, blue limestone slabs, with a cleaved edge, provide a flight of steps rough in appearance but comfortable to walk on.  
**ITTRE | DESIGNED BY JEAN DELOGNE LANDSCAPING**
4. An unusual entrance with a downward slope, forming a curve with typical, blue limestone stairs with large treads, called "pas d'âne" in French.  
**BRUSSELS | DESIGNED BY JOËL CLAISSE ARCHITECTURES**
5. A monumental staircase, made of sandstone rubble and small tiles, is inserted between two walls in the same stone.  
**MARCHE-EN-FAMENNE | DESIGNED BY SYNERGY INTERNATIONAL**





Roof: A structure that forms the cover or top of a building, mainly designed to protect the inside from bad weather and the wet.

# THE ROOF

## PROJECT | STONE, A LINK TO THE FUTURE



This building with its listed façade is located in the historic town centre of Gent. When this property was being renovated, the architect, inspired by the colours of the blue limestone of the old quays, opted for the aesthetically very successful choice of a blue limestone roof. Heritage and contemporary architecture subtly come together through the use of that material. The contemporary design indicates expansion and the new function of the project while expressing respect for the material. A material that was formerly used for waterproofing and decoration. The result is a “total project”, where the use of the material and the detail refers both to the language of contemporary architecture specific to the designer and to the historic setting as well as to the customary application of blue limestone.

GENT | DESIGNED BY VINCENT VAN DUYSSEN ARCHITECTS

Roofs covered with slate or thackstone belong nowadays to the vocabulary of our architectural heritage. In the Ardennes, the shale or slate roof was omnipresent in former times. In structures where concrete is used in pillars and slabs, the roof has disappeared. But there are still architects who devise innovative ways of using what was once an essential feature of a dwelling.



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**Translations**

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© Pierres et Marbres de Wallonie (Serge Brison, Jean-Marc Bodson, Cristina Marchi, Dominique Guerrier Dubarle), Benjamin Struelens (2/1), Daylight (3/4; 4/1; 5/1), Serge Anton (22/6). Thanks to several designers who provided visual material.

**Design and graphic production**

Noir Quadri

**Printing**

JCBGAM

**Published**

Pierre Dethier, Rue des Pieds d'Alouette, 11, B-5100 Naninne - March 2014

**With the support of**

Wallonie



Service public de Wallonie



Wallonia.be

EXPORT INVESTMENT

**Publications**

The Stone Notebooks, 2009-2013  
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Stone and architecture · WALLS · WALLS<sup>2</sup> · INTERIORS  
Stone and public space · SURFACES · WATER

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A longing for natural stone, 2005

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# LEXICON

## **BED**

Surface of a course of hewn stones. Interval of two superimposed courses, whether or not they are filled with binder.

## **BOND / BONDING**

Way in which rough or hewn stones are arranged.

## **CLEAVING / CLEAVED**

Action of splitting or causing a stone or ore to split; split stone or ore.

## **CRUST**

Weathered surface of a layer of limestone (generally blue limestone) slightly different owing to its geological contact with another sedimentary material.

## **FAÇADE**

Outside face of a building or a set of faces that people generally see from the outside.

## **FACING**

An outer layer or coat of material applied to the inside or outside of walls or surfaces to consolidate, to protect or to decorate.

## **FINISH**

Final or last stage of an operation intended to produce a particular surface or texture. Refers to all the methods used for working the surface of the stone intended to make it smoother, more polished or to increase non-slip properties, etc.

## **JAMB**

A pier, also called upright or jamb, may refer to the side part of a bay, a door, a window, a mantelpiece

## **LAYOUT DRAWING**

Elevation or plan view of the arrangement of elements with a specific shape to form a pattern, compose an assembly, cover a surface or fill a volume. The layout drawing is necessary, for example, when the arrangement of tiles, roofing, facing or bonding has to be planned.

## **MASONRY**

The craft of building a structure by assembling elementary materials, bound by mortar. Structure made of materials (brickwork, stonework, etc.) assembled and usually joined by a binder (cement, mortar, etc.).

## **OPENING**

Width of a bay.

## **PAS D'ÂNE**

The French word for stairs with large treads and low steps, sometimes having an abutment that is higher at one side than at the other.

## **RUBBLESTONE**

Coarse, rough-hewn or squared stone, used with mortar for building a wall.

## **SLATE**

A compact foliated rock that can be split into thin layers along natural cleavage planes.

## **SQUARED**

Made square, hewn at right angles.

## **STEP / RISER**

Two basic elements of the staircase : the step (or tread) on which the foot is placed ; the riser is the vertical part of a stair or step that offers support for the foot when ascending... or descending.

## **THACKSTONE**

Flat stone of shale, limestone, basalt or gneiss, the surface of which very significant in relation to the thickness, which is generally obtained by cleaving and mainly used for roofs and tiling. Thackstone is generally extracted from quarries, called "lauzières" in French or from natural boulders or comes from stones removed from fields before cultivation. Thackstone is thicker than slate.