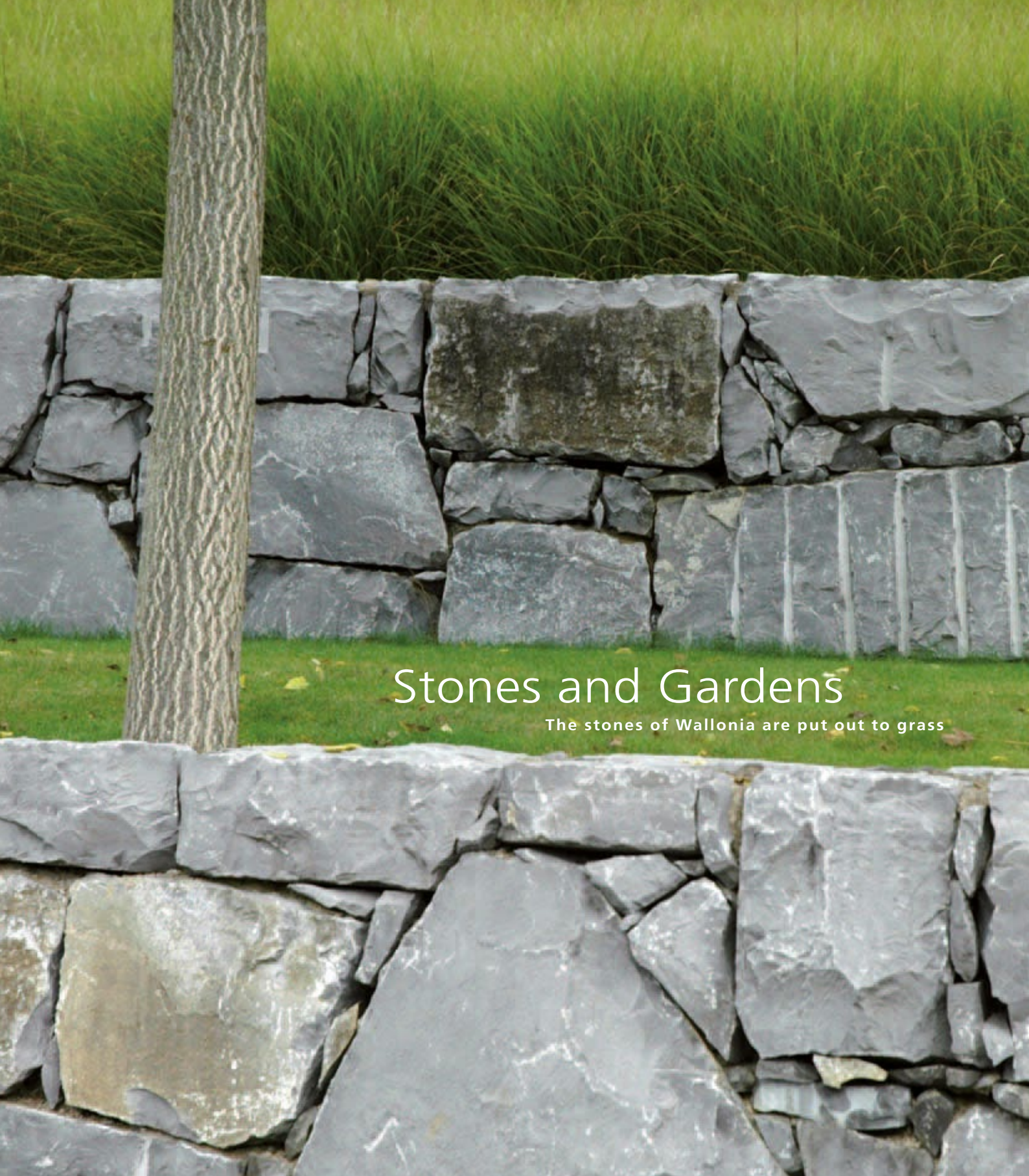

Stones and Gardens

The stones of Wallonia are put out to grass

"Plants are often at their most beautiful when they grow on walls", observes Benoît Fondu. "Stone is a natural material, rough and primitive, which comes from the quarry as paving, slabs, rubble, gravel but which can sometimes mellow if necessary. This material can make for contrasting effects. This is what makes it the accomplice of gardeners and landscapers.

Jean Delogne is in love with stone. He knows how to bring it to life in all the diversity of its forms. He makes it appear always different, unexpected : mysterious, rebellious, gentle, seductive…"If we love stone, if we have learnt its demands, its strengths and its weaknesses, our craft is not that of an artist who arranges a work in space," he stresses. Stone is above all an element in a composition. It is, as it were, never there for itself. It is neither chosen nor placed at random, but it forms part of a complex whole – a landscape."

Stones tell stories and are a record of expertise. Serge Delsemme, who, through his gardens, has established valuable links with stonemasons, stone layers, sculptors and stone engravers, knows this. "The garden would never be anything without them : from these encounters, from their mastery, their workmanship and their talent are born an atmosphere and a landscape."

Living material that becomes polished and ages gently, that reflects the day's moods, that can be taken over by plant life …, stone has long been the silent companion of mankind. From gigantic blocks towering up towards the sky to the retaining walls of mountains stretching to infinity, it is spirit and landscape. As long as gardens have existed, stone has surrounded and protected them ; it has lain discreetly underfoot, has made play with contours and conspired with plants to create subtle harmonies.

The creators of gardens have had the right idea. Stone is often at the centre of the spaces that they outline. They love it for the diversity of its textures and colours, for the changing play of light in rain or in sunlight, for the shadows that make other landscapes appear on its surface. They are entranced by the plants that nestle in the hollows of rocks.

The following pages unveil the work of a score of Belgian landscape gardeners who use the stones of Wallonia in their creations : bluestone, sandy limestone, sandstone, schistose sandstone, schist… Presented through a group of themes centred on different features of the contemporary garden - surfacing, walls, pools, fountains…, these sensitive creations show that opening the garden to stone, even in a small way, is above all an affair of the heart or even a passion.

Cover Picture : Fortis Bank. Luxembourg. Design by Wirtz International SA.

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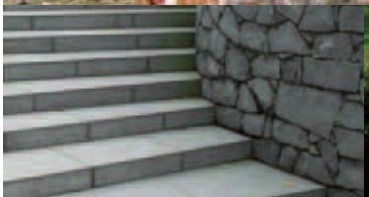
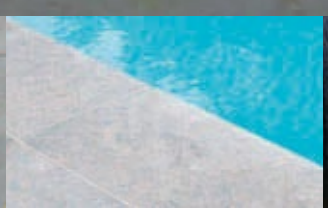
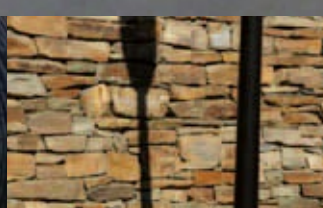


Contents

Simple surfacings and raw materials 2
Traditional surfacings and graded cobblestones 4
Smooth surfaces and elegantly cut slabs 6
Stone paths, fords and stepping stones 8
"Calades" and "upright" surfacings 10
Kerbs and delimitations 13
Walls and low walls 14
Retaining walls 16
Copings 18
Gabion walls 20
Staircases and steps 22
Pools, ponds and ornamental lakes 24
Springs and fountains 26
Technical matters 28
Swimming pools, surrounds and sundecks 30
Surrounding walls, boundaries and enclosures 32
Stone garden ornaments, furniture and other objects 34







Simple surfacings and raw materials

Stone has always been used to create comfortable surfaces for those parts of the garden intended especially for walking on. Small round river pebbles – or loose chippings – have long been used because they are very easy to lay. The surface crunches under foot; the visitor slows down and takes time to look at the garden around him. Today we make use of crushed stone – or gravel – even chippings from the quarry, which are generally quite cheap. Many landscape gardeners have managed to find interesting uses for these materials.

Composed of little fragments of crushed rock, the gravel surfacing of Condroz sandstone here is one of the least costly. A relatively small grade (4/6 or 6/10) gives a more elegant effect. A thickness of 3 to 4 centimetres is enough for easy walking. The same stone is best used for the other nearby arrangements.

Private garden. Ittre. Design by CELIA Landscape and Environment.

The centre of this farmyard has been transformed into an interior garden. To create a radical change of atmosphere, the surfacing of the path that crosses it, shrouded in dense vegetation, is made up chiefly by the juxtaposition of large slices of blue limestone crusts. The rough texture of the stone gives an impression of "virgin" nature, which transports the visitor to a different scene.

Private garden. Sensenruth. Design by Le Bouillon Blanc.

Only quite recently did crushed schist make an appearance among garden materials. Used as gravel, it brings beautiful blue-grey shades to the surfacing but also luminosity in the rain. Used as a mulch, it keeps the planted areas tidy and reduces the need for upkeep.

COMMENT

The gravel, laid on a simple hard core, is a form of surfacing which drains particularly well and is therefore environment friendly. At the bottom of the trench, it is useful to place a layer of permeable geotextile film on the compacted earth, which will ensure the stability of the surfacing. Finally, the gravel must be regularly raked and weeded, especially by thermal weed control, which avoids the use of herbicides.

Private garden. Tervuren. Design by François Goffinet (UK) Ltd.

Private garden. Xhoffraix. Design by Nelles frères.

A similar effect is obtained with schistose sandstone. Here the crusts have been simply sawn in parallel.

The blue limestone crust

In nature, the limestone rock called bluestone or Belgian blue limestone comes in the form of enormous layers of rock, one on the other, separated by substrata of other geological origins. The outer surface of each layer, in contact with other materials, does not have the same texture or the same homogeneity as the deep rock. This is what we call the "crust". Previously this material was considered as waste. Today we recognise its qualities, especially aesthetically, which accord well with contemporary gardens. It is used for surfacing, for steps and for walls…

Private garden. Beveren. Design by Fondu Landscape Architects.

The ground has been covered with small blocks of crushed bluestone. The contrast between the matt grey blocks with the shiny corrugated steel wall is enhanced by the curved metal surround.

Traditional surfacings and graded cobblestones

As old as the world, paving made up of small cubes of hewn stone is inseparable from scenes of our ancient roads and farmyards. It is also used in gardens for walkways, thresholds and patios. It is used alone or together with stone slabs to vary the rhythm or to emphasise a large dolomite surface, which is also a stone from Wallonia.

Private garden. Keerbergen. Design by Patrick Verbruggen.

A marriage of blue limestone cobbles and gravel, set off by an impressive clump of grasses.

Private garden. Harelbeke. Design by Paul Deroose.

A courtyard opening on to flowerbeds and boxwood hedges also accommodates a dining area of great simplicity.

Schist also makes it possible to create paved areas that are more irregular but not without charm.

Private garden. Herbeumont. Design by Ardoisières d'Herbeumont.

This contemporary paving strikes an antique note : some of the blue limestone cobbles have been deliberately aged. They are easily laid without pointing, like clinkers.

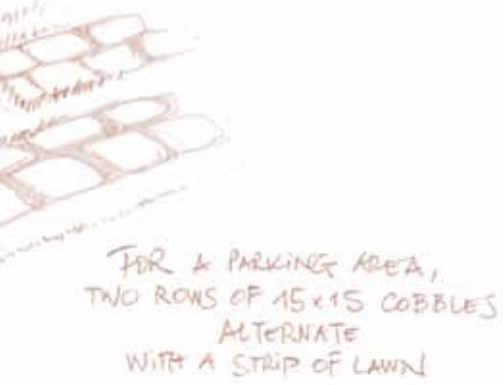
Imagix. Tournai. Design by Peter Carpentier.

Place verte. Soignies. Design by Poly'Art.

This blue limestone paving brings together several different finishes. On one line, all the stones are of the same width so as to maintain consistency in the calpinage and a clear visual impression.

Paving with slabs of Condroz sandstone is combined with a crazy paving (opus incertum) of the same stone.

Provincial estate. Chevetogne. Design by Fondu Landscape Architect.



COMMENT

10x10 or 15x15 square cobbles are very often used, but the regular surface of rectangular headers or slabs always laid with contrasting jointing also gives a very beautiful effect. The cobbles can also be pointed with sand in the garden's walkways. For driveways, they will be pointed with cement or mortar in a shade as near as possible to that of the surfacing. Sometime reclaimed cobbles are used : in this case, we must be particularly careful of the quality because there are often traces of bitumen, which are very difficult to eliminate.

Private garden. Chaudfontaine. Design by Serge Delsemme.

Blue limestone cobbles wind prettily under clumps of box hedging. The cobbles are laid parallel following the line of the path so as to clearly trace the edges of the path.

Private garden. Ittre. Design by CEIJA Landscape & Environment.

This surfacing reuses sandy limestone laid in the traditional manner with thick pointing.

Smooth surfaces and elegantly cut slabs

When we want to surface an area for placing a table, chairs and armchairs, a completely flat pavement, practical to use, is required. The flagstones enlarge the space of a terrace and show to advantage the objects and furniture arrayed there. Complete harmony with the colours and textures of the house is to be sought after when the terrace connects directly with it; a little more originality can be shown in other parts of the garden.

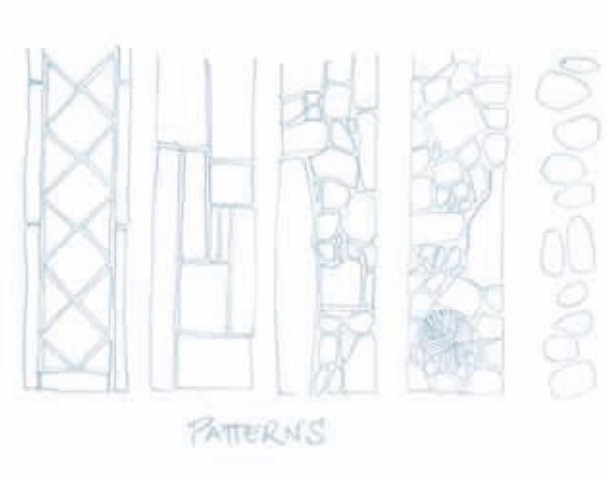
Large blue limestone flags are laid with almost invisible pointing for a very contemporary effect.

An area of schist crazy paving is set in the midst of a gravelled area.

Private garden. Audenghem. Design by Landscape Design.

Provincial estate. Chevetogne. Design by Fondu Landscape Architects.

An opus incertum (crazy paving) of Condroz sandstone blends with drystone walls from the same quarry.



Private garden. Luxembourg. Design by In Situ.

Schist paving laid without pointing in an inner courtyard. The bed covered with pearlwort is integrated with the chequered pattern of the flagstones: the soft texture of the plant highlights the almost sculpted surface of the flagstones.

An opus incertum (crazy paving) of schist is given a new appearance by pearlwort pointing.

Cemetery, Noyers.

Tournay-Solvay Park. Brussels. Design by IBGE.

This terrace with square schist flagstones overhangs the pond below. The pointing is left open and a system of fixing by screws on a metal structure allows the space underneath to remain visible.

Private garden. Rhode-Saint-Genèse. Design by Paul Deroose.

COMMENT

Stone flagstones used for terraces at least 4cm thick are laid on concrete which is often reinforced. The weight of the stone is the main brake on the size of the format used. Once the foundations are perfectly laid, all that is left is to create a calpinage layout which must follow certain rules: ensuring that in each opening, the flagstone is placed in line with the door, placing the flagstones lengthwise parallel to the wall along which it runs, progressively increasing the width of the flagstones to compensate for the perspective effect, ensuring, by slightly varying the length of the flagstones, that the paving has large enough elements around the edges. Attractive paving is often made up of flagstones of different dimensions.

Private garden Ittre. Design by CELIA Landscape & Environment.

The same blue limestone for a terrace, composed this time of very big thick flags with rough edges, some of which are laid leaving a large space between them.

A carpet of blue limestone flags allows the lawn to be seen among the stones.

Private garden. Lille. Design by Patrick Verbruggen.

Stepping stones lead from a terrace with uneven edges. The schist flagstones are placed so as to allow a mower to pass easily over them.

Private garden. Cugnon. Design by Le Bouillon Blanc.

Stone paths, fords and stepping stones

Illustrated in an almost caricatural way by Japanese paths, stone walkways are routes that fit very easily into the landscape of the garden. They provide a safe and pleasant material for the feet.

Provincial estate. Chevetogne. Design by Fondu Landscape Architects.

These stepping stones in Condroz sandstone encourage children to enjoy themselves by crossing a wide stretch of sand.

Private garden. Ixelles. Design by Herbe et forêt.

Stepping stones laid on moss delicately merge into the wooden decking of this little town garden. They are meticulously cut and slightly raised showing the path without tripping the walker.

Cemetery. Houffalize.

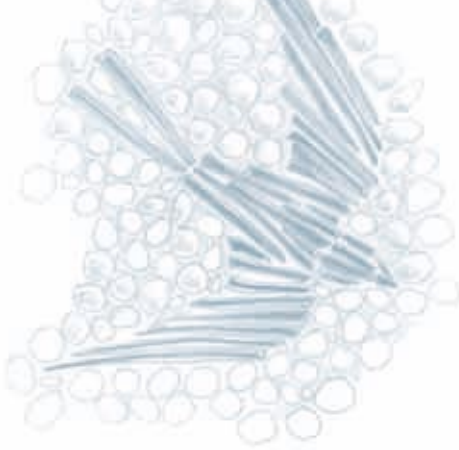
Midway between stepping stones and a true avenue, this path is almost a chessboard : the slabs of Ardennes schist are laid evenly and create a very formal design, which enlivens the lawn in which it is set.

COMMENT

In a path of stepping stones, the slabs must be thicker than in a terrace to avoid the risk of breakage. Laid on stabilised sand that drains away the water and gives no problem in the event of frost, each flagstone is embedded in earth cut out to fit. Finally, to make it pleasant to walk on, the distance between two consecutive stones should correspond to a normal step of about 68 cm.

Nature reserve of Engeland. Uccle. Design by IBGE.

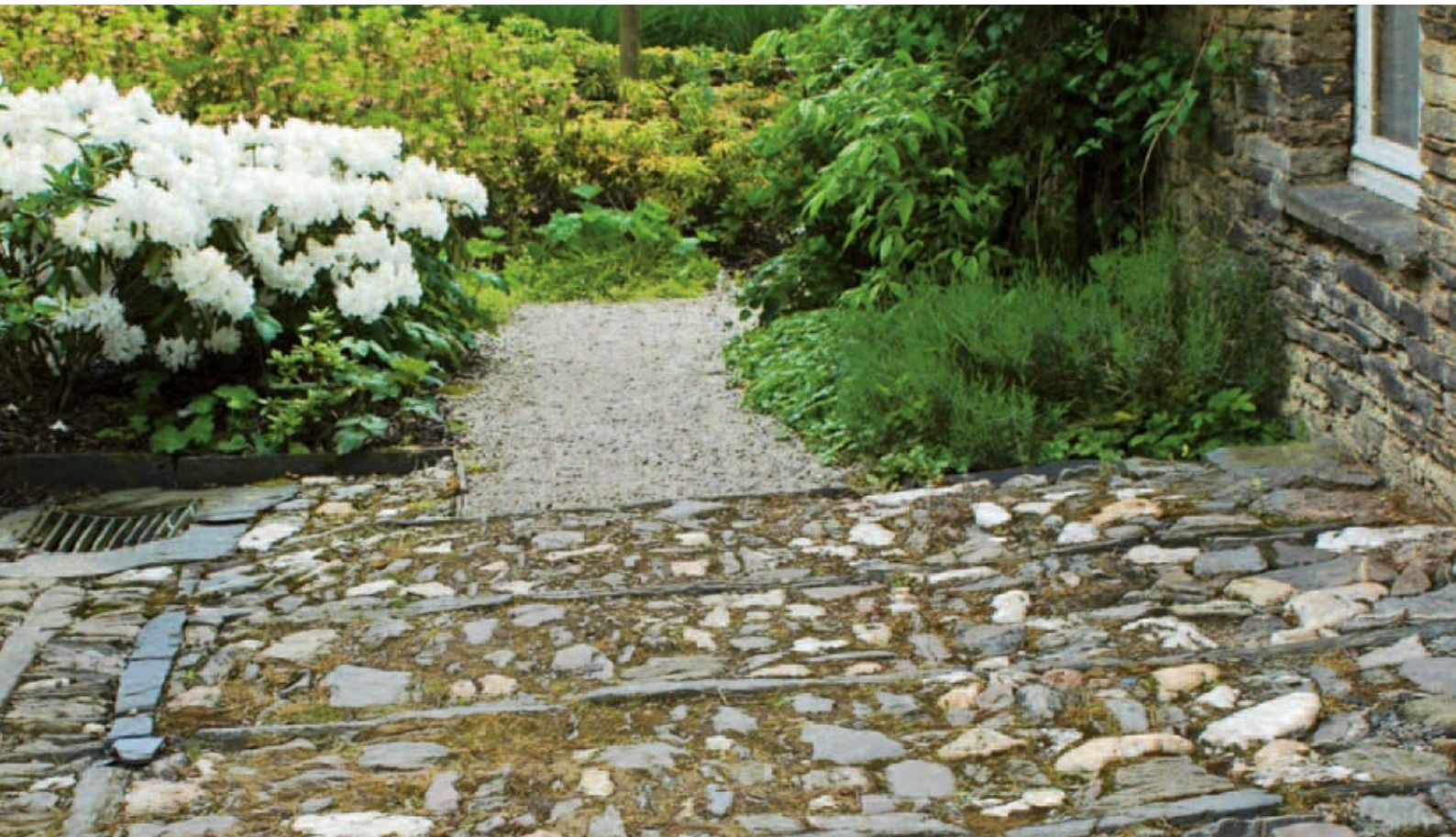
These oblong schist slabs trace a path towards a nature reserve : a way of guiding the walker's steps without too much effect on the environment.



“Calades” and “upright” surfacings

Of Mediterranean origin, the term “calade” refers to a surface made up of an assemblage of rough and irregular stones driven vertically into the ground, whence the name “upright” surfacing. The traditional use of river shingle in some of these “calades” has evolved towards the creation of “mosaics” of pebbles, often of different colours, sometimes of sophisticated design, which are fashionable in gardens today.

The design on the ground can vary with the combined use of flat-surfaced larger blocks.



Jardin du Fleuriste. Laeken. Design by IBGE.

Putting a rather smooth surface – here of cobblestones – with a more uneven surface – here a calade with rounded forms – creates pleasing contrasts where the eye is drawn to changing reflections and where the feet experience varied sensations.

Private garden. Cugnon. Design Le Bouillon Blanc.

An upright surface in the manner of the traditional surfaces of the Ardennes. The schist of the region, which is presented in the form of fairly thin slabs, does not crumble from the effect of frost and can be laid edgewise.

COMMENT

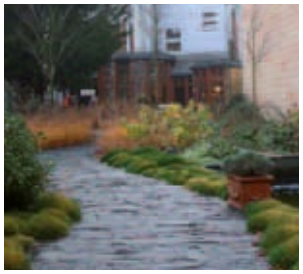
The calade allows only a small part of the surface of the stones to be seen, unlike surfacings which are laid flat like paving stones, which cover as much of the surface as possible. Real upright surfacings are not pointed; this gives them good elasticity, the stones propping each other up. This also allows them to breathe and to drain off water. With gravelled surfacings, they form an ecological ground cover, which maintains a good balance between the earth and the air and limits the run off of rainwater.

Private garden. Cugnon. Design by Le Bouillon Blanc.

Jardin du Fleuriste. Laeken. Design IBGE.

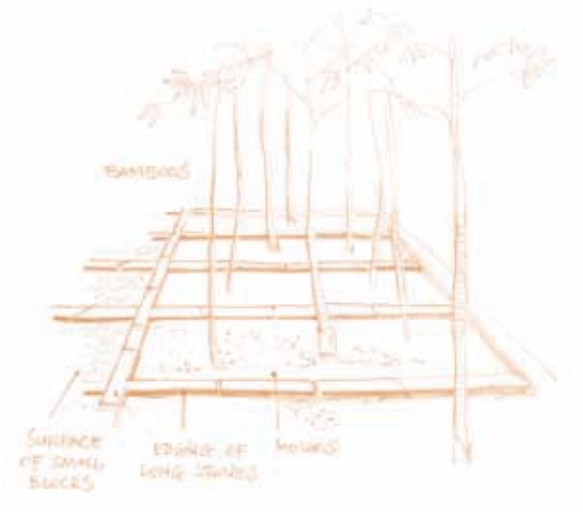
A false calade of pebbles, because it has been pointed with cement, embellishes the base of a staircase like a carpet at the point where two paths cross. To support the calade, a kerbing is usually necessary. Here it consists of small blue limestone cobbles.

This avenue made of schist placed edgewise shows a beautiful match of textures and colours between the stone on the ground, arranged very graphically and the clumps of vegetation surrounding it, dominated by the blurred outlines of the molinia or moor grass.

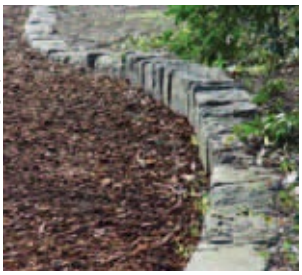


Private garden. Gent. Design by Fondu Landscape Architects.

Kerbs and delimitations



Borders are used to separate an avenue, a terrace or any other type of surfacing from a flowerbed or a lawn, or even another kind of surfacing. It makes the separation clearer, makes a path more easily recognisable and greatly facilitates upkeep because it avoids the mixing of materials. It also sometimes discourages entry into another part of the garden. Various materials are used for this: plants – box, santolina, lavender… –, wood, wrought iron, steel... or stone.



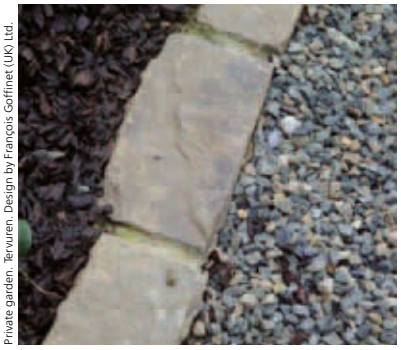
Jardin du Fleuriste. Laeken. Design by IBGE.

This edging made of thick pieces of blue limestone rubble is laid so as to be slightly higher than the bed which it delimits.

COMMENT

To be practical, borders and kerbstones delimit two parts of the garden by creating a slight difference of level. This allows, for example, a path to be raked without getting gravel on the lawn. If we want to mulch a flowerbed, the edging which surrounds it must be 5 to 10 cm higher than the level of the earth.

This classic edging, level with the ground, consists of flat pieces of Condroz sandstone. It emphasises the base of the low drystone wall but, above all, it clearly marks the limit of the path's surface. Further on, it prevents the gravel from invading the beds.



Private garden. Tervuren. Design by François Goffinet (UK) Ltd.

Private garden. Cugnon. Design by Le Bouillon Blanc.

To achieve beautiful curves, the elements of the edging must be reduced in length, the tighter the curves. This shows a curved edging with elements of varied length, which easily allows the schist to be placed edgewise.

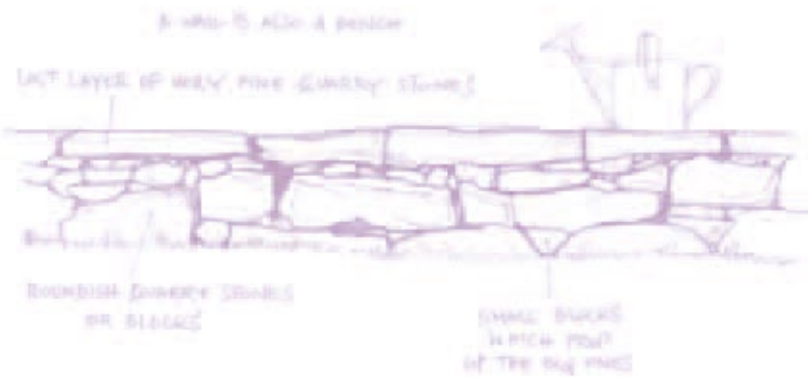
Schist can also be used in thin slabs, deliberately placed with more overlap.

Private garden. Audergem. Design by Landscape Design.

Walls and low walls

Because of their multiple uses, gardens can hardly do without walls. With them it is possible to create separations, to support embankments, to break the force of the wind, produce microclimates favourable to many varieties of plants. Here, too, stone is a remarkable material both in the diversity of the textures we find and for the variety of colours and forms which quarrying produces, flagstones, quarry stones, blocks… Drystone walls are today in favour with landscape gardeners.

This garden is organised around the theme of the old schist walls that are typical of the region, some of which were already on the site. New walls were added to define the spaces – the garden from the pool, the terraces – or to mark the lines of perspective. The copings of upright stones are sometimes all that is visible.



A wall of schistose sandstone quarry stone serves as a parapet in a park with a rugged landscape.

Park Heintz. Luxembourg. Design by In Situ.

This schist wall is covered with the same cut stone. The consistency in the choice of materials, which is found in the stairs and the wall of the barn at the rear, makes the whole very harmonious.

Private garden. Cugnon. Design by Le Boullon Blanc.

Private garden. Cugnon. Design by Le Boullon Blanc.

The south-facing drystone walls create warmer microclimates, very favourable for espaliered fruit trees, which are thus sheltered from wind and frost.

Private garden. Vielsalm. Design by Serge Delsemme.

Fortis Bank. Luxembourg. Design by Wirtz International SA.

Meuse limestone walls carve out part of the garden and harmonise with the vegetation.

COMMENT

Drystone walls were traditionally built stone by stone without cement or mortar. This technique requires real skill, still present in some regions. For reasons of speed of execution, the drystone walls currently constructed are often braced invisibly in the centre of the wall by stabilised sand or concrete which ensures strength This way of working allows other no less interesting forms of bonding.

Public space. Luxembourg.

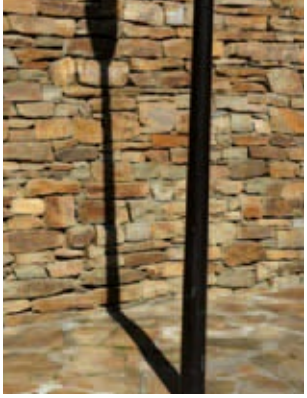
For a "natural" effect, sandy limestone develops a patina with time : its shades evolve towards grey and the rock quickly becomes naturalised.

Retaining walls

Retaining walls are very important in the garden landscape. There is a great choice of stones ; in their origin, in their colour and in their size. Some prefer to use relatively flat stones ; others quarry stone or even bigger blocks. The construction of a beautiful wall doesn't just happen : it is the work of a professional who knows his trade.

Dobbelenberg Park. Diegem. Design by Wirtz International SA.

An almost circular wall seems to raise the ground for a spectacular effect.



Provincial estate. Chevetogne.
Design by Fondu Landscape Architects.

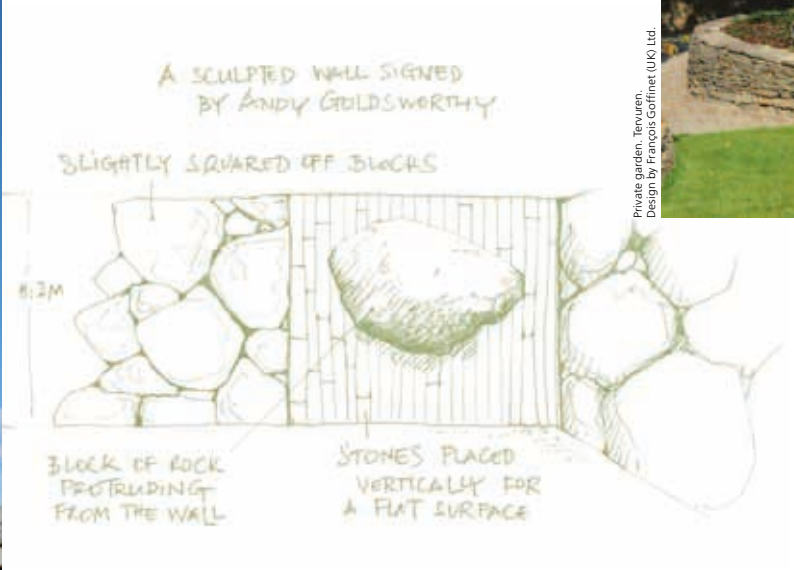
A wall of Condroz quarried sandstone more than two metres high is built in a traditional way.

A descending series of walls built of quarry stones stabilises a steep slope. Each is judiciously underlined with Pittosporums cut so as to allow the different terraces to be seen. The vivid satiny green of the slender foliage enlivens the matt grey of the stone.

Hôtel Radisson. Spa. Design by Serge Delsemme.

Private garden. Tervuren.
Design by François Goffinet (UK) Ltd.

To obtain a delicate effect, slabs of Condroz sandstone have been chosen here. The base of the wall is composed of several rows of thicker stones, which become thinner towards the top to give the wall more strength. A batter is indispensable for the stability and the beauty of the result.



Albert Park. Kortrijk. Design by Sum Project.

A network entirely made up of small curved walls delineates in a minimalist way the lawns and avenues. To create an always desirable contrast, the walls are built of very large blocks of schistose sandstone.

A bit of non-conformism in the bonding of the stones should not be rejected: here the landscaper has joined forces with a sculptor to conceive a long wall made up entirely of curves. This wall, made of great blocks of Condroz sandstone, attracts the eye and thus avoids the monotony of the nearby parking lot.

Private garden. Chaudfontaine. Design by Serge Delsemme. Sculptor Paolo Gasparotto.

COMMENT

When the terrain slopes too strongly, only a wall can effectively stabilise the earth. Different techniques can be used, from the simple drystone wall to a concrete wall, which can be masked by a stone cladding. Concrete must in general have a height of 1.50 m or more, particularly if we want to stabilise recently made embankments, which are much less stable than earth in place. Sorting the stones brought from the quarry, or even hewn again on the spot, is an indispensable stage: it is the way to choose the right stone for the right place, to form relatively homogeneous beds… or to rigorously undertake an original design.

Copings

Once a wall has been erected, it is topped with a coping, which gives an aesthetic finish to the whole and also prevents the penetration of rainwater into the stonework and also prevents frost damage. The coping is often made from slabs of stone, usually cut from the same material as the stone wall itself.

On this steeply-sloping quarry stone wall, it was not possible to use normal coping. The choice was therefore made to lay slabs of Condroz sandstone in a series of steps, forming a sort of staircase.

Private garden. Baileux. Design by Plant Consult.

The coping can also be placed on a wall of different material. This is often the case for brick walls. Here blue limestone coping stones rest on low walls overlaid with wood.

This classic coping, made from thick schistose sandstone, shows a beautiful colour variation between the blue-grey stone slice and the cleaved face in tones approaching purple.

Bérinzenne tower. Spa. Design by Daniel Dethier.

COMMENT

So that the water does not stagnate on the surface, the coping has a slight slope, sometimes double, and on the edge of the underside there are one or two drips or drip grooves. These are narrow channels, which prevent the water running on the wall. For an aesthetic result, it must project enough from the wall – a few millimetres are enough – so that the coping does not extend too far from the wall itself. The coping is usually fixed with mortar but certain types of stone sometimes require more effective adhesive cement.

Private garden. Vielsalm. Design by Serge Delsemme.

The local tradition offers many beautiful variants, which are often employed in a contemporary way by landscapers. Here, schist slabs cover an unfaced drystone wall, which does not need any particular protection.

A blue limestone coping with a double slope supports a wrought iron guardrail.

Jardin du Fleuriste. Laeken. Design by IBGE.

Provincial estate. Chevetogne. Design by Fondu Landscape Architects.

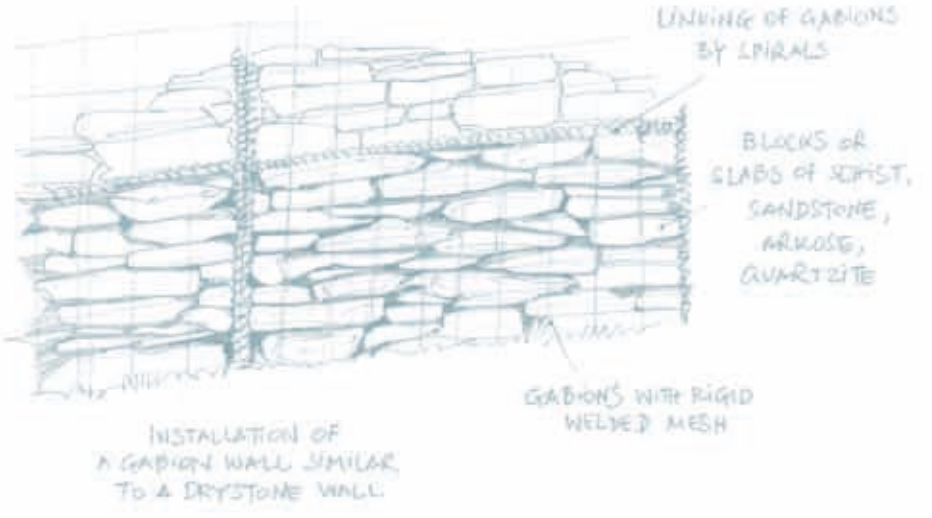
Gabion walls

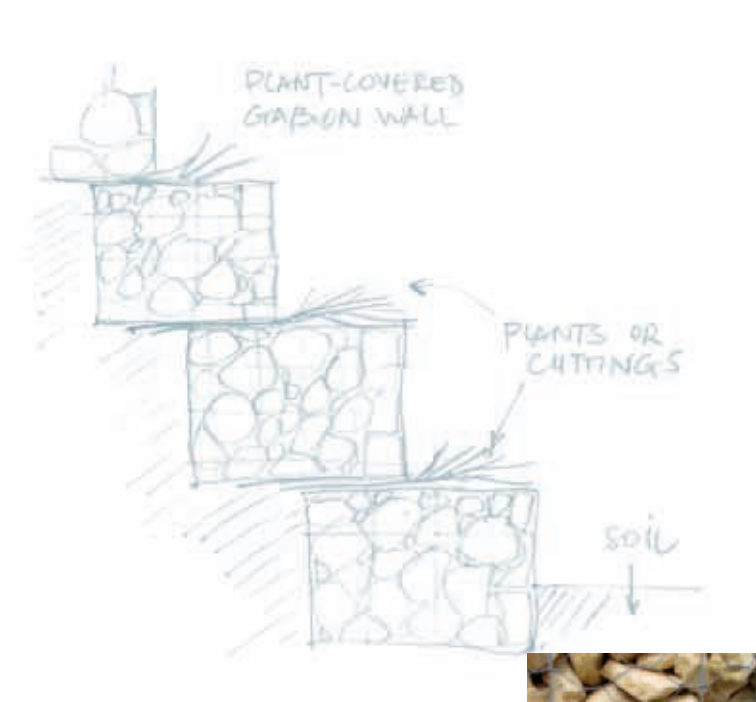
Originally designed to reduce the cost of stabilising road embankments or riverbanks, gabions are more and more used by landscapers who have found in them a new contemporary technique, which can be used in many ways. The manufacturers, for their part, have developed products with finishes more suitable for garden design.

Gabions easily become covered with climbing plants and even by plants growing in the pockets of soil placed inside or between the gabions. They therefore become practically invisible in very little time.

Hôtel Radisson. Spa. Design by Serge Delsemme.

Used in terracing, the lines of gabions with rigid armatures describe elegant curves, which extend those of the stairs built of rough blue limestone slabs.





The gabion can be filled with crushed blocks of blue limestone or sandstone but also with pebbles. With the use of different materials, the effects of textures and colours bring new diversity to this type of construction.

Serre de l'Evolution. Meise.
Design by Belgian National Botanical Garden.

Private garden. Overijse. Design by Landscape Design.

A bank retained by a line of gabions with flexible hexagonal mesh has been planted with fairly high grasses.

Hôtel Radisson. Spa. Design by Serge Delsemme.

Hôtel Radisson. Spa. Design by Serge Delsemme.

Gabions blend with other materials : here low walls built with this technique run along a terrace of exotic wood.

COMMENT

A simple cube of metallic wire filled with blocks of stone, the gabion is a modular structure, which enables a wide variety of results adapted to various contexts. Originally a retaining wall, it was filled with blocks of disparate stones, which it was attempted to cover with vegetation in order to mask it. More aesthetic and often more rigid gabions have appeared on the market, which can be filled with stones mounted like a drystone wall : the gabion then becomes a fully integrated object that is used as a retaining wall, a dividing wall or even a graphic element in a composition.

Staircases and steps

Because it allows access to a level that you are hardly aware of and contrives surprises for the eye of the stroller, the staircase is an important element in the discovery of a garden. It is also often, like a work of art, majestic, or delicately, embedded in greenery. A few steps are sometimes enough. But it must above all be pleasant to go up, easy on the feet and safe!

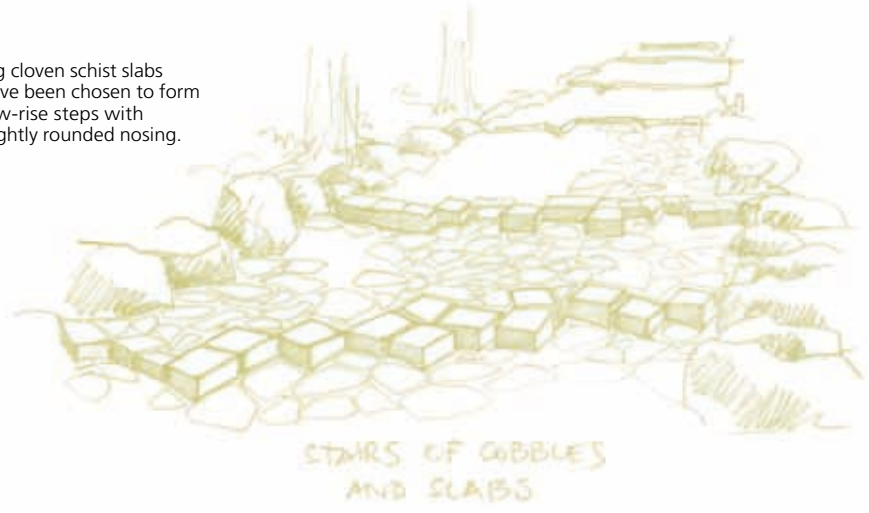
Some blue limestone steps descend along the wall that skirts a pond created above in the small valley. A glance across the water opens up new perspectives.

Private garden. Lot. Design by Patrick Verbruggen.

Very contemporary, without artifice, these blue limestone stairs seem to take the visitor to the end of the world.

Private garden. Plainevaux. Design by Le Bouillon Blanc.

Big cloven schist slabs have been chosen to form low-rise steps with slightly rounded nosing.



In a curved staircase, there is a subtle interplay between the pattern of the pointing, never aligned, and the steps : here no stone is identical to another.

Private garden. Tilff. Design by Serge Delsemme.

Twin Squares. Diegem.
Design by CELIA Landscape & Environment.

In this staircase, which curves around an old tree, the steps are of Condroz sandstone and gravel.

Stairs of Meuse limestone are surrounded by gently curving walls with original bonding.

Fortis Bank. Luxembourg. Design by Wirtz International SA.

Private garden. Rhode-Saint-Genèse. Design by Paul Deroose.

Roughly cut blue limestone steps mark a passage to another area of the garden.

Private garden. Ittre. Design by CELIA Landscape & Environment.

Private garden. Lasne.

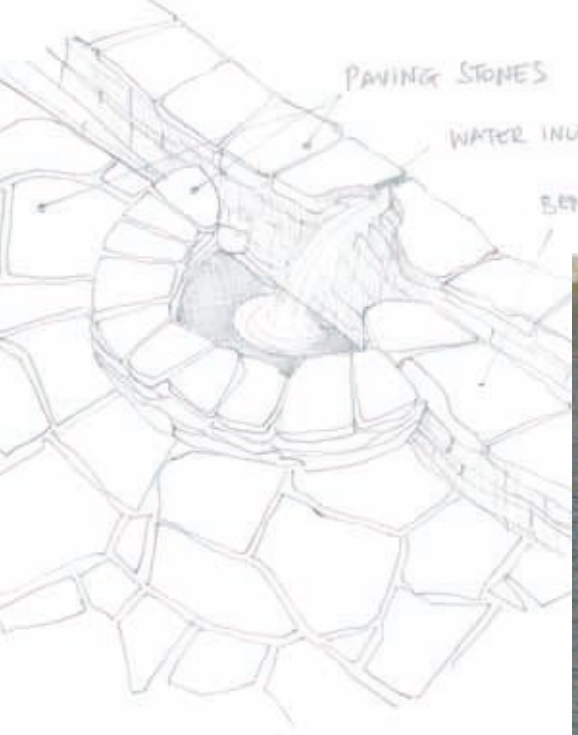
When a few steps are enough, a stone riser can support a long turf step and make striking lines against a large expanse of lawn.

COMMENT

Wherever they are placed, stairs must, above all, be pleasant to climb : for easy climbing they must be of an uneven number with steps and risers of appropriate height and depth. Finally stairs must not be slippery, especially near the doorways of a house. The stone can be specially cut to make it less smooth.

Private garden. Ittre. Design by CELIA Landscape & Environment.

Smoothly cut stone blocks with a blue limestone crust contribute to the contrast of these stairs, which lead the walker from a formal garden to a much wilder area.



Pools, ponds and ornamental lakes

Quietly reflecting the sky, water can transform a garden; even more than the wind, it is a living murmuring force that makes for tranquillity and opens up the mysteries of nature. In Japan, stone and water are the two fundamental sacred elements of the garden. In Europe, too, we often find them associated. Water marries the stone, wears it down and gently shapes it…Thanks to water the stone lives, takes on changing shades of colour and is covered with mosses and plants.

A pool surround of sandstone cobbles slopes down to a rectangular pool below the level of the water, which is itself filled with big stone blocks.

In a very contemporary style, a regularly shaped pool is bounded by high concrete walls and edged with cobblestones. The patch of lawn, which closes the prospect, introduces the soft green of nature into this rather severe mineral environment.

Private garden, Sterrebeek.
Design by Patrick Verbruggen.

Provincial estate. Chevetogne. Design by Fondu Landscape Architects.

Private garden. Kessel-Lo. Design by Charlier Tuinen.

A slender channel, edged with blue limestone coping extends the view and creates a beautiful space where the gaze loses itself.

In a hollow encompassed by great schist slabs nestles a natural pool in which water lilies bloom. Great care has been taken with the arrangement of the stones.

Private garden. Auderghem. Design by Landscape Design.

Thick blue limestone crusts mark out a very plain and formal rectangular pool. The whole thing is subtly softened by aquatic plants, which, in places, mask the stone coping, and by ferns planted around the pool.

Private garden. Ittre.
Design by CELIA Landscape and Environment.

To emphasise the bank of a circular pool and to retain a rural feeling, edgewise placed schist has been used with the visible faces all cut to the same height. Cleverly, the waterproofing film has been inserted between the stones and is therefore almost invisible.

Private garden. Cugnon. Design by Le Bouillon Blanc.

COMMENT

To hide liners above the water level, the border stones must be fairly round so as not to pierce the membrane and big enough to come well above the surface of the water. Sometimes it is necessary to plan for a bigger pool than that which will be effectively seen once the work is finished. Some stones can be kept in place by a water-resistant mortar. If a fairly humid atmosphere is created around the pool, the water will help the stones to become covered with moss. Then it is good to be able to choose the stones from the quarry where it is possible to find some that have already been colonised by plants attached to their surface and which will only have to develop once the stone is installed in the garden.

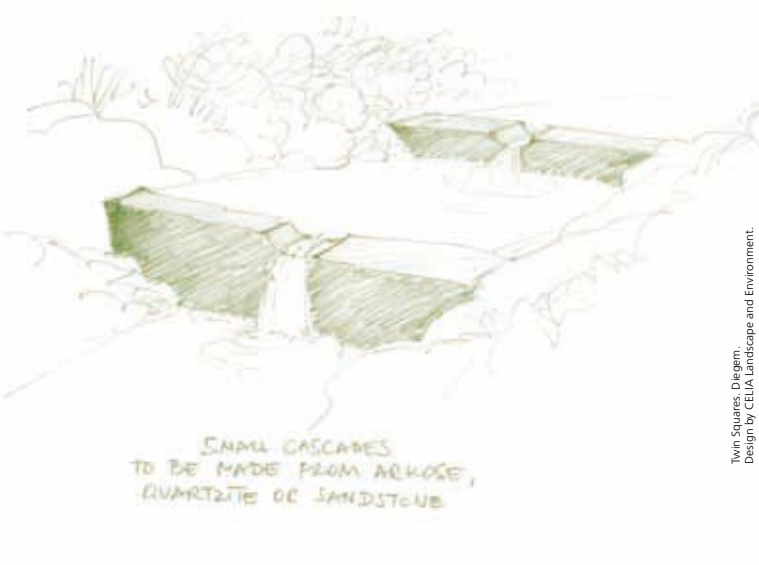
The banks can be retained as here by stone using a beautiful regular bonding of schist placed edgewise. The bottom can be treated in the same way, creating beautiful patterns beneath the water.

Banks of the Ourthe. Houffalize.

Springs and fountains

The gentle sound of lapping waves or the murmuring of a waterfall enliven the acoustic environment of the garden : the sound of gushing water is joyful, salutary and just a little mischievous. Water can also emerge from stone to feed a pool in an almost natural way. It can issue from a spectacular fountain or from a modest spring to satisfy the various uses of the garden.

The water spreads over the semi-circular plate of this fountain set against a wall and runs off in a fine and delicate transparent sheet. The plate and the frontal stone, chiselled in circular waves are of blue limestone.



A waterfall made from pebbles and flat stones piled one on another allows the water to flow with a rippling sound towards the pool.

Twin Squares. Diegem.
Design by CELIA Landscape and Environment.

Private garden. Cugnon.
Design by Le Bouillon blanc.

At the foot of a staircase, a sheet of cut schist has a narrow channel cut out of it to allow the water to flow into the pool.

A very fine sheet of water plays almost silently over horizontal and vertical slabs of schist : the wet stone is almost the only sign of the passage of the water.

Private garden. Luxembourg. Design by In Situ.

Three enormous blocks of blue limestone crust, apparently resting on nothing, allow foaming water to spurt out and splash on to the rough material of the stone.

Twin Squares. Diegem.
Design by CELIA Landscape and Environment.

Jardin des Célestines. Namur.
Sculpture by Florence Fréson.

Water glistening in the hollow of a stream or of a meandering channel is a very natural way to envisage water in movement. The stone has been hollowed out here to create a lively flow.

This fountain of Meuse limestone was designed with a deep trough in which plants may bathe.
The front of the trough is carved with fine wavelets.

Private garden. Tilff. Design of the fountain by Bruno Albert.
Sculpture by Florence Fréson.

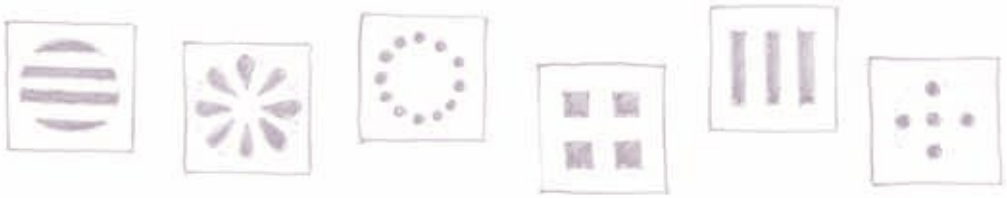
Private garden. Ixelles. Design by Herbe et Forêt.

COMMENT

Today, waterfalls, cascades and other fountains are trying to achieve simplicity. Natural stone, cut, sculpted or polished brings out the living beauty of the water. To succeed, a fountain must be carefully designed and the stones correctly placed. The construction of a series of waterfalls needs, for example, a balanced succession of changes of level, carefully thought out positioning of the stones on which the water will splash and the creation of little pools of calmer water, etc.

Private garden. Knokke. Design by Herbe et Forêt.

In the narrow little garden fronting a house on the street, a block of blue limestone has a sheet of water running over it before flowing over the pebbles of a miniature stream. In such a creation, the choice of the stone is primordial and can require a long search. That is the only difficulty, but isn't a garden a work of patience ?



Technical matters

The management of water in a garden – run-off water or rainwater, but also water flowing into a pond or pool – involves the presence on the ground of a certain number of objects : in particular gulleys and covered channels, cover plates and covers for inspection chambers. These elements must sometimes be placed in visible locations where the use of prefabricated material is not always very pleasing. Making them in stone is often the best way to integrate them visually.

COMMENT

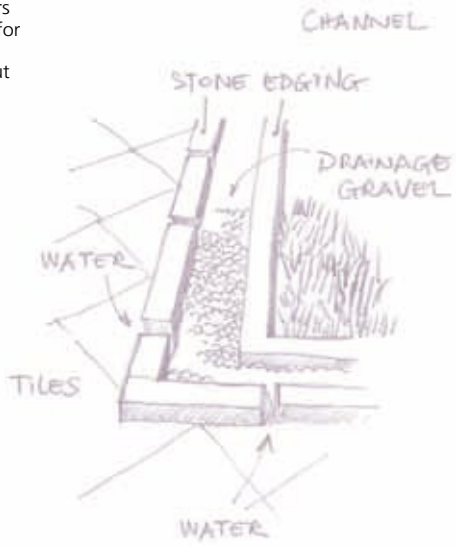
With a little ingenuity, it is always possible to replace a cast iron grating with a stone cover. The openings for the water to pass through can be in various shapes : slots, circles, etc. For draining off the water, we can often use quite small cover plates (20 x 20 for example) but if necessary these covers can easily be designed for much larger surfaces (up to 100 x 100). It is necessary to use fairly thick slabs since they can be weakened by the openings cut in them. The work can be done to order by a stonecutter or a good paving layer.

Private garden. Ittre.
Design by CELIA Landscape & Environment.

On the surround of a swimming pool, it is sometimes necessary to have access to one or two small technical facilities. The cover of this opening has been made in the same traditionally cut blue limestone as the terrace, laid in the same direction and provided with a simple stainless steel knob enabling the cover to be lifted more easily.

Private garden. Conneux.
Design by François Goffinet (UK) Ltd.

Alongside a terrace there should be a gulley for collecting rainwater. This drain has been covered with paving stones and some squares covers pierced with holes for evacuation of the water have been cut out of the stone.



Private garden. Aarschot. Design by Claude Rebold.

This cover plate, made of blue limestone like the terrace around it, has a handle let into the stone allowing it to be lifted easily without causing an obstruction.

Made from the same schist as the walls of the old house, the surrounds of this pool extend the line of the buildings without visual break.

Private garden. Cugnon. Design by Le Bouillon Blanc.

Swimming pools, surrounds and sundecks

While concrete has become the inevitable structure of the swimming pool, stone is often still its soul. Whether we want the pool to be incorporated like the water features and ponds that have punctuated the history of gardens, whether we prefer a natural pool which blends in more with the landscape, or whether we prefer a standard swimming pool, stone is a harmonious, practical material which ensures durability to one of the relatively expensive accoutrements of a garden.

Stone also allows more organic forms which can resemble a natural pool. Here the solid form of the surround is inharmony with the blocks of blue limestone embedded in the terrace.

Private garden. Aarschot. Design by Claude Rebold.

COMMENT

Sundecks and surrounds can be made from practically all the Walloon stones provided that the surface finish does not make them slippery. If we prefer to dive into water with a natural colour, the use of dark coloured stones, such as blue limestone or schist for the sides and the bottom of the pool gives the water a very natural deep blue-green tinge.

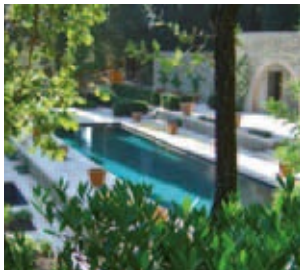
Mineral surroundings close to the pool with blocks and some sturdy blue limestone steps of the same material as the pool surround.

Private garden. Ittre. Design by CELIA Landscape and Environment.

Private garden. Ittre. Design by CELIA Landscape and Environment.

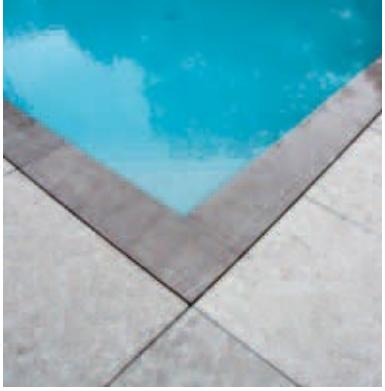
This overflowing pool lies slightly below an adjoining summer dining area. The water that runs off on this side of the pool into a narrow basin also plays the role of a refreshing fountain.

Private garden. Hasselt. Design by Ars Horti.



Private garden. Chianti.
Design by François Goffinet (UK) Ltd.

The inside of this pool is made of blue limestone : the very dark bottom gives a beautiful appearance of depth to the water.

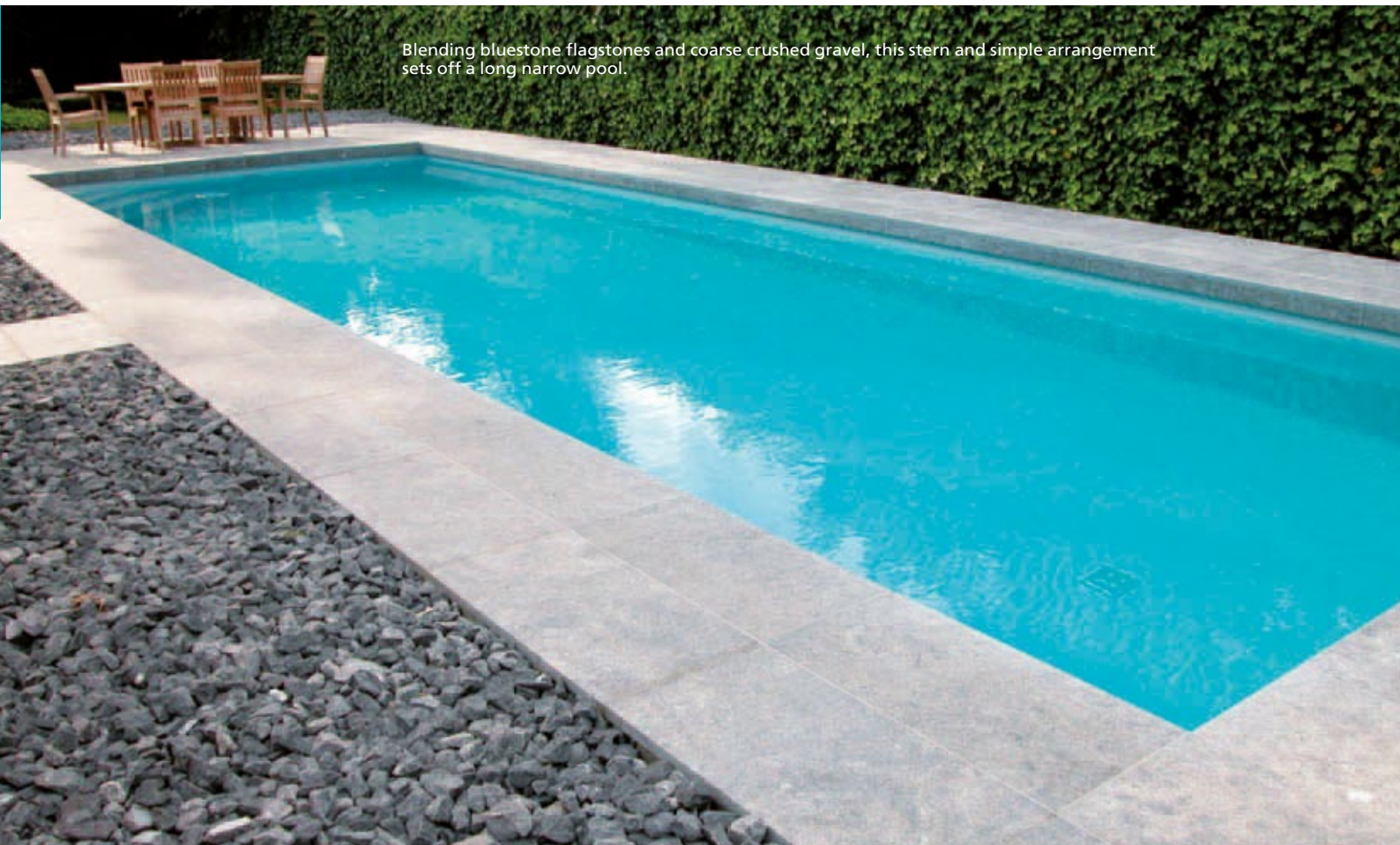


Private garden. Rhode-Saint-Genèse. Design by Paul Deroose.

The terrace extends to surround a pool, which overhangs the slope of a small valley. The blue limestone coping just below the level of the water contrasts attractively with the dry stone and the water.

Private garden. Courtrai. Design by Paul Deroose.

A simple blue limestone coping surrounds the pool and adjoins a very contemporary bathing pavilion. The swimming pool fits neatly into a garden which itself is also austere.



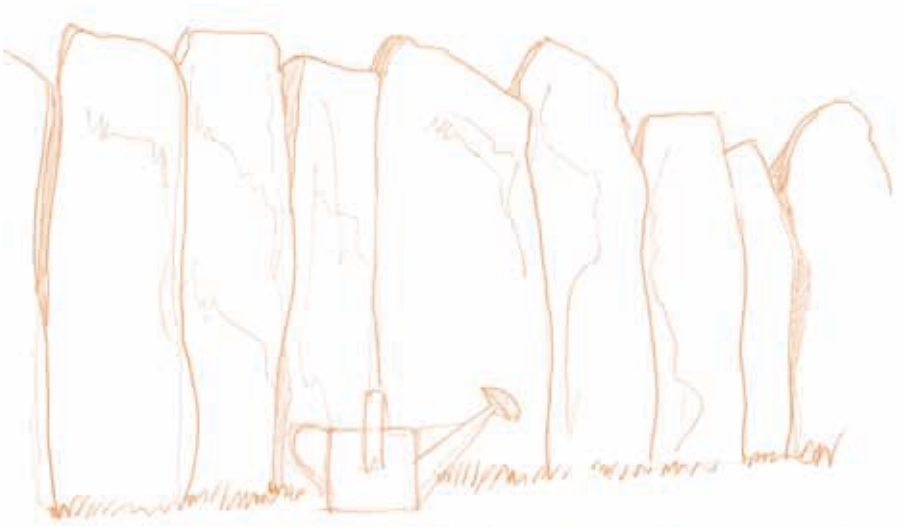
Blending bluestone flagstones and coarse crushed gravel, this stern and simple arrangement sets off a long narrow pool.

Surrounding walls, boundaries and enclosures

Though enclosing a garden with a stone wall, of whatever height, is today rather rare, stone can sometimes become an unexpected decorative element, when we want to emphasise the boundary of the garden, to delimit a clump of trees or flowers or to create a separation between two surfaces which we want to be distinct. Large natural slabs are an alternative to a brick wall.

Private garden. Auderghem. Design by Landscape Design.

Limiting a clump by deliberately raising it to separate the masses of different heights can be cleverly done with stone : here a succession of slabs of schist also highlights the greenery growing in the interstices.



Private garden. Noirfontaine. Design by Le Bouillon Blanc.

This area of greenery is isolated from the garden by an alignment of upright schist slabs, some of them trimmed. Sheltered from the wind, this space surrounded by trees warms up quickly in the sun thanks also to the stone which absorbs the heat.

Private garden. Ucimont. Design by Le Bouillon Blanc.

Private garden. Sensenruth. Design by Le Bouillon Blanc.

To enliven a chestnut tree enclosure, it is enough to introduce some tall stone slabs. The grain of the stone plays with the light. The woven hazelnut branches also show it to advantage.

Private garden. Sensenruth. Design by Le Bouillon Blanc.

To enclose the kitchen garden, the superb grey-blue of the schist stands out pleasingly against the green of the hedges and the wood of the woven hazelnut hedgerow.

COMMENT

To stand firmly in the ground, a stone must be one third buried in the soil and the earth must be well packed down around the base. It can also be sustained by a mound of stabilised sand, which allows a larger proportion of the stone to remain above ground. Finding the right stones needs patience above all!

Twin Squares. Diegem. Design by Célia Landscape & Environment.

A very sturdy impression with blue limestone crust, which lights up under the anise-green lady's mantles.

Stone garden ornaments, furniture and other objects

From the block of stone that gives a focus to the view, to hewn or engraved stone objects, stone as a material inspires many landscape architects, drawn by the beauty and the symbolism of the rock in the garden space. They bring to it an eye and a sensitivity that one also finds in the garden art of Japan or in contemporary artistic movements that are close to nature. Many sculptors also bring space, nature and stone together in poetic works, which fit, naturally into the garden.

Sensenruth. Artist Jean-Paul Couvert.

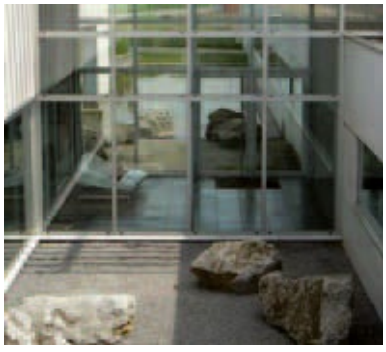
The circumference of a circle appears surreptitiously on the slightly sculpted blocks of schist. These installations express all the richness that a work of art brings to a garden.

Private garden. Plainevaux. Design by Serge Delsemme.
Drinking trough for birds Florence Fréson. Bench Louis Wuidar.

This sculpture in Meuse limestone is both a sensitive work of art and a drinking trough for birds.

COMMENT

Stone has many valuable qualities which landscapers and artists know how to exploit. It is a source of discoveries for the senses. The texture of split schist, or the ability of quartzite to retain heat, appeal to the sense of touch. Its ability to give out melodious sounds, as is the case with Meuse limestone, transforms stone into a musical instrument. Some artists regularly show their works in galleries and gardens or work on their materials in the quarry. It is sufficient to let oneself be led by curiosity…



Private garden. Tielt. Design by Patrick Verbruggen.

To break the monotony of a space without plants, blocks of blue limestone provide this interior courtyard with a rhythm of its own.

Made with the same stone as other elements of the garden, this table is naturally in keeping with the designer's project.

Private garden. Tiff. Design by Serge Delsemme.

Private garden. Ittre.
Design by CELIA Landscape and Environment.

At the entrance to the garden, an engraved blue limestone slab retranscribes a message of welcome for the visitor.

Private garden. Paris. Artiste Benoît Luyckx.

Blue limestone is a marvellous stone for sculpture ; more than any other element in the garden, a fountain can give artists the opportunity to express themselves by creating a unique work. Here the detail of a fountain wall sculpted for a terrace garden shows all the refinement that this material can bring.

Rops Museum. Namur. Artist Anne Jones.

Lexicon

Alignment : arrangement of points, reference marks, landmarks in a straight line.
Ashlar : a block of hewn stone with straight edges.
Batter : the slope of the face of a wall that recedes gradually backwards and upwards.
Bed : Layer of quarry stone, hewn stones / quarry bed : stratification plane.
Block : a large solid piece of stone.
Bonding : any of various arrangements of stones in a wall in which they overlap to provide strength.
Calpinage : representation of the details of a façade or of patterns.
Channel, gutter : part of the ground, generally lowered, or small drainage channel to collect and carry away run-off water or rain water.
Cleaving, cleave : split or cause to split along a natural weakness.
Clinkers : a hard brick used as a paving stone fitted without need for mortar.
Coping, kerbing or sundeck : stone or course of stones forming the upper edge of a well, pond or a swimming pool.
Cover, cover plate : cover of a manhole or inspection hole.
Crushing, crushed : break or ground rock into small particles / Refers to an ore reduced into small particles : aggregate, chippings, grit, ballast, etc.
Cut, hew, hewn : shaping of the stone giving one or more faces an agreed appearance. It means both cutting the stone to an agreed size, and the appearance of the surface of the facing according to the tools used (bush hammered, etc.).
Drip, Drip groove : a projection at the front lower edge of an element exposed to the rain, designed to throw water clear of the façade below.
Edge : long and narrow face of a Squaresd element (or slab).
Flagstone : a slab whose horizontal dimensions are twice the thickness, with a minimum width of 15 cm.
Formal : a garden designed clearly and precisely where form and appearance take precedence over matter and content.
Grade : largest dimension of a gravel. Gravels are generally sorted according to grades expressed in mm. Example : 0/2, 2/4, 4/6, 6/10, 10/14, 14/20.
Grading : setting an element to the right dimension.
Gravel : a mixture of rock fragments and pebbles that is coarser than sand.
Grit or chippings : small hard particles of crushed rock, where grades range from 0/2(mm) to 20/32 (mm).
Gulley : a channel with a manhole and grid for run-off water or rainwater.
Hard core : large gravel used to form a foundation, with a maximum grade of 20/32.
Header : a large stone laid across a wall so that its end is flush with the outer surface.
Installation : Set of objects, devices, etc. assembled for an artistic purpose.
Liability to frost damage : sensitivity of a material to frost and thaw. Standardised tests are performed on stones to determine liability to frost damage.
Mortar : a mixture composed of fine aggregate, a binder and possibly, colorants, additives or various additions (water-repellent mortar : damp-proofing mortar).
Mosaic : a decorative or figurative design made up of small pieces of different coloured stone.
Mulch : various matter used to cover a cultivated surface, in particular to avoid the development of undesirable weeds.
Nosing : the edge of a step or stair that projects beyond the riser.
Opus incertum (crazy paving) : a form of paving as for a path, made of slabs of stone of irregular shape fitted together.
Opus reticulatum : work carried out using stone elements of geometrical shape.
Paving block : any element of which neither of the two plane dimensions exceeds twice the height / mosaic paving : small-sized cubic paving (generally 8 x 8 cm).
Perpend, throughstone : a hewn element that passes though a wall from one side to the other.
Flat : work (or surface) without projections or depressions.
Platines : thin sandstone paving.
Plessage : the woven hedge : the art of intertwining still supple branches to form hedgerows.
Point, pointing : interstice more or less wide left between two elements to be filled subsequently by the pointing process. The process of finishing joints in brickwork, masonry, etc. with mortar. Laying with sharp joints is laying with butting elements making pointing with mortar impossible.
Riser : the vertical part of a stair or step.
Rough : which has not been the subject of finishing (rough quarry stone).
Stabilised sand : sand mixed with cement.
Tightness : a close and compact construction so as to be impervious to water, air, etc.
Tread : top surface of a step.
Trench : a deep ditch dug before foundation work.

Stones from Wallonia

Wallonia hosts a vast and varied pallet of quarried stones.
The examples of applications in the gardens illustrated here are suitable for most of them. 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


ARKOSE Cleaved rubble stone

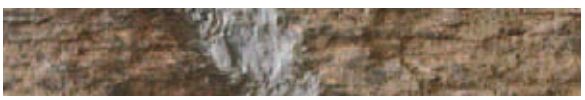

QUARTZITE Cleaved rubble stone


SCHISTOSE SANDSTONE Cleaved rubble stone


SCHISTOSE SANDSTONE Cleaved rubble stone


SCHISTOSE SANDSTONE Cleaved rubble stone


SCHISTOSE SANDSTONE Cleaved rubble stone


SCHIST Cleaved rubble stone


FLINT Cleaved rubble stone

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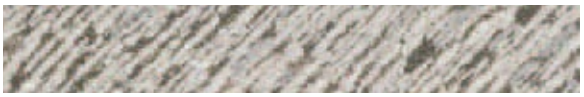
BLUE LIMESTONE Crusted

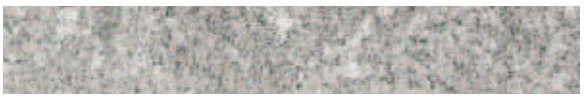

BLUE LIMESTONE Bush-hammered

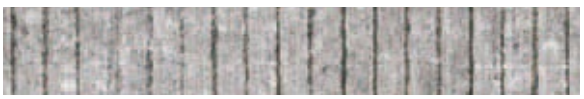

BLUE LIMESTONE Bush-hammered

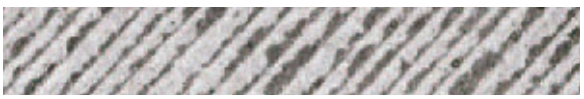

VINALMONT MEUSE LIMESTONE Old cut

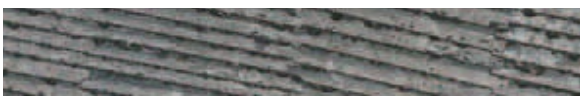

BLUE LIMESTONE Ice flowers


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

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PIERRES & MARBRES WALLONIE

PIERRES et MARBRES de WALLONIE asbl
Rue des Pieds d'Alouette 11 · B-5100 Naninne · T +32 (0)81.22.76.64 · F +32 (0)81.74.57.62
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