





## 2 TIMELESS STONES

The surface par excellence for terraces in the gardens of dwelling houses. Stone paving is always a popular choice wherever it's necessary to lay down a surface which is very flat, practical and, above all, comfortable.



## 6 STONES ON STILTS

In Brussels, a wooden pontoon manages to support real stone paving, which seems to be attached to the bank in some mysterious way.



## 8 CREATIVE ASSEMBLIES

Rough-hewn stone fragments have always been used for crazy paving, also known as "random bond" or "opus incertum". They are laid in an almost intuitive manner which certainly looks very simple. And yet...



## 12 DIVERSIONS

Quarrying generates rock waste with varied origins: in particular, parts of deposits which are difficult to exploit, operating residues and cutting waste. Some are still useful and can be of interest to gardeners and landscape artists.



# 01

STONE IN THE GARDEN | SURFACES

## 14 COMBINATIONS OF MATERIALS

Using stone to enhance a basic surface through simple little touches which transform its image completely means you have to reconcile the demands of originality, beauty, and your budget – and show some creativity!

**Stone** is undoubtedly the first natural material which was used to create stable surfaces which could withstand heavy loads, making it possible for people to walk around easily, even when it was raining – safe and comfortable at the same time.

In gardens, stone is used for paths, laid out in terraces, borders lawns, and is combined with timber, concrete or brick. The diversity of the rocks present within the subsoil of Wallonia and the variety of their shades and textures result in an infinite number of surfaces, as detected by the imagination of garden designers and landscape gardeners.

All of them are carrying on a long-established tradition, in which technical know-how has to adapt to aesthetic values which always take priority. In their use of stone, they adapt it to our modern ideas of beauty, and they often shake up the styles.

Stone never changes, but the way it's used can evolve, and its products can diversify. While it is still frequently expensive, there are some projects which demonstrate that there's always a way round the problem. The examples selected in the following pages refer to very diverse applications. They were chosen for their simplicity or for their originality, for their extreme sophistication or because they open up many possible options – which is the mark of the great classics.

# Clean lines for classical paving

## TIMELESS STONES

The centres of our cities are absolutely full of gardens which are long and narrow, hidden away between very ordinary-looking walls. Stone can be used to create paving which looks good and which restores a little charm to what can be rather sad open spaces.



In order to restore harmony to these gardens, it can frequently be a good idea to break up the visual impression by using several “greenery beds” marching across them. Thus, every space can obtain a better balance in its proportions. You instinctively feel better there...

In this garden in Courtrai town centre, which Jos Pannecoucke has entirely re-structured, a largely glassed-in extension which houses a Summer dining-room added on at the rear of the house leaves a narrow space up against the party wall before taking up the entire width of the site once more. Nowadays, various elements are deployed here: a path leads to a terrace surrounded by palisaded lime trees. They both have plain blue limestone paving. Further on, a lawn is bordered by hydrangeas. And then, behind a hedge, we find a romantic building backing onto the wall at the bottom of the garden – a very effective formal concept!

The paved surface of the path is edged by little box tree borders planted with hornbeams, which avoids the impression of a narrow corridor. The terrace continues the simplicity of the layout. The paving introduces different colours and textures, as against the ivory-coloured rendering walls. Here, simplicity rhymes with purity, and can be adapted to all kinds of garden furniture, whether classic or contemporary, monochrome or colourful.

▶ PRIVATE GARDEN, KORTRIJK, DESIGN BY JOS PANNECOUCKE/DE EGELANTIER



## STONE

Blue limestone is used here in square flagstones with two formats: large ones measuring 50 x 50 cm and small ones measuring 20 x 20 cm. The slabs ordered were 3 cm thick. The stone was flame-textured to make it less likely that anyone would slip in bad weather.

## TECHNIQUE

Selecting paving slabs with standard dimensions reduces costs and makes the construction work easier. These formats are generally in stock and don't need any shaping by a stonecutter. The layout selected is orthogonal and harmonises with the window-frames and the veranda-frame to create a unity which is vital for these small spaces. Shrubs stand out on the periphery, along the walls, in order to frame the view of the stone vase on a plinth. A plinth is vital to finish off this external room and obtain a result which is clear-cut and very harmonious. The rendering comes to a halt a few millimetres from the plinth, thanks to a small "gutter"

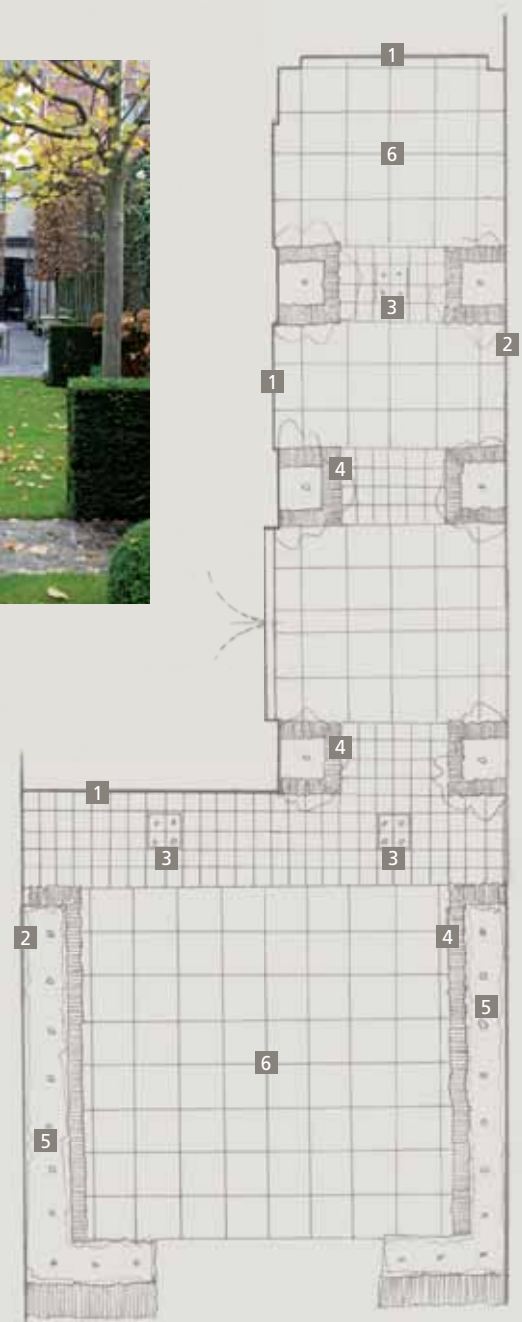
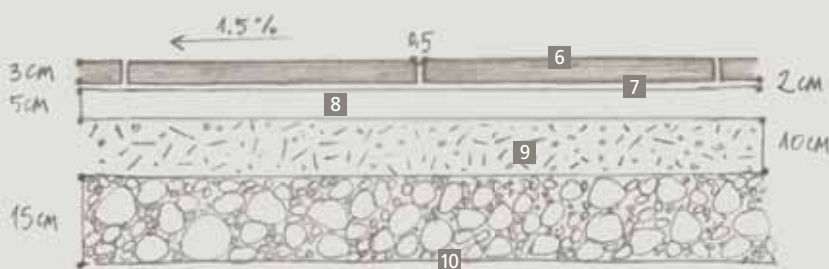
The entire design is based on symmetry, which can sometimes be difficult in view of the cramped spaces we are dealing with.

Note the camouflage of the manhole covers in the slabs with the same dimensions, regularly distributed within the paving.

The layout takes account of the breaks in the axis of each French window (with a central slab), the axes of the path and the terrace (joined in the middle in each case). The small-sized slabs make it possible to minimise the impact of the gully plates and to create breaks to liven up paving which would otherwise be decidedly rigid.



- |                  |                   |                                 |                       |
|------------------|-------------------|---------------------------------|-----------------------|
| 1 facades        | 4 box hedges      | 6 natural stone slab 3 cm thick | 9 reinforced concrete |
| 2 party walls    | 5 palisaded trees | 7 fixing mortar                 | 10 metalling          |
| 3 manhole covers |                   | 8 stabilised sand               |                       |





1

## Non-standard formats

There are countless ways of designing a terrace. Above all, the stone selected should harmonise with the building which it adjoins.

**1** Using large flagstones doesn't just create the effect of luxury. It frequently creates harmony as well. These slabs enlarge the space available. They are very difficult to obtain because they require special blocks and special cutting. In Uccle, the architect Joël Claisse won the 1<sup>st</sup> Contemporary Architecture Prize for a superb piece of work which included, in particular, a terrace giving onto a garden re-designed by Jacques Wirtz: sobriety, elegance, refinement in the structural details and quality in the implementation. That sums up the approving comments from the jury.

**2** The details have been handled in a particularly successful way: very fine joints and the covering of a trickle of water, which even succeeds in becoming an architectural gesture!

PRIVATE GARDEN, UCCLE, DESIGN BY JOËL CLAISSE ARCHITECTURES



2



3

**3** The garden architect Jean Delogne worked on these large slabs, using elements obtained by roughly sawing up a block of blue limestone. The "wild" edges of the slabs are used to construct the periphery of the terrace and to seat the trees in their very irregular joints. At the point where the table and chairs are placed, the edges of the slabs have been recut to provide the necessary comfort for guests.

PRIVATE GARDEN, HAUT-ITTRE, DESIGN BY JEAN DELOGNE

# A masterwork

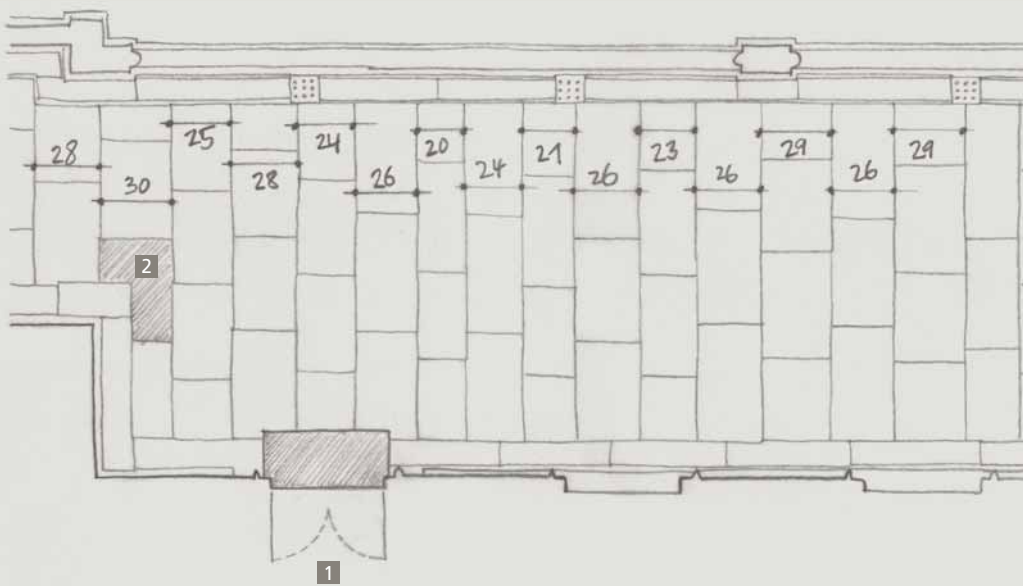
In the history of paving, rules have been handed down to implement successful projects which can be adapted perfectly to the form of each space, even if it's complicated or intricately divided.

Here's one example, selected from the creations of the garden architect François Goffinet. This is a narrow terrace, to which access is gained by a French window **1**. On each side of the paving is a border, made up of elements which are almost uniform in length but which can be adapted to any existing "obstacles". The external

border covers a trickle of water, which has stone outlets fitted with small holes through which the water can be drained. The direction of the slabs is given here by the very elongated form of the terrace. To limit the visual impact of this "corridor", the slabs are laid perpendicular to the axis. As a general rule, for a classical

terrace the slabs are laid perpendicular to the axis of the breaks. Even when we look attentively at this layout, it is difficult, to say the least, to determine the rules governing its positioning. We should remember that the dimensions of the slabs follow the golden number (1.618) or the ratio 1.414 as closely as possible.

These are symbols of harmony for the proportions between these elements. The thresholds are formed from a single stone element – no joint is visible in the threshold axis. A certain number of joints (app. ¼) may be found in the lengthwise axis of the terrace. At the corners **2**, it's necessary to find slab dimensions which are harmonious and are not too small (which would make the stone fragile and would not look good). When we look at paving like this, we are made aware of the complexity which results from a constant desire for harmony. A masterwork, which demonstrates that certain skills have been handed down through time...



**1** Vinalmont limestone is a Meuse limestone lighter than blue limestone. It's elegant and has a very fine grain.  
PRIVATE GARDEN, LUXEMBOURG (L), DESIGN BY WIRTZ INTERNATIONAL S.A.



**2** Schistose sandstone offers more sustained colours, in a range of warm tones, and with a very grey cut.  
GREEN WALK, AUDERGHEM, DESIGN BY DESSIN ET CONSTRUCTION

## Variations in ranges

If bluestone is the queen of flagstones, there are other rocks which are also very suitable for this work.



**3** The main interest of schist lies in the slight irregularity of its slightly glossy surface and in its shades of colour.  
PRIVATE GARDEN, LUXEMBOURG (L), DESIGN BY CHRISTOPHE SPEHAR/ IN SITU GARDENS



# Paving reflected in the water of a pond

## STONES ON STILTS

On Silex's Walk in Watermael-Boitsfort, a small raised rest area opens onto a bucolic landscape of reed beds. This contemporary layout satisfies those walkers who come to look at some very well-preserved landscapes.



The Green Walk surrounds Brussels with an ecological pedestrian ringway. It's a system of pathways which allows you to observe often vulnerable natural environments and it showcases attractive landscapes and provides reasonable access to some unique sites right in the central area of the city. At Boitsfort, it runs alongside a stretch of water which is protected due to its high biological value. A pontoon makes it easier to explore this environment without damaging the bank. It's made from schist, and on the path side, it is bordered by a bench made from concrete and stone.

To give the impression that this is floating above the water, the design agency, Dessin et Construction, created a load-bearing wooden structure which projects slightly into the pool. Seen from the opposite bank, the dominant impression is of a wooden structure. The paving seems to be floating in air. Water and vegetation can be seen through the narrow cracks of the joints.

This project is a success because the schist has a living, uneven surface which is always changing. Other positive factors are the concrete, which has been treated so that it looks like puddled clay as if it had been laid in thick layers, and the team of designers, who were very sensitive to the "genus loci", the spirit of the place!

➤ GREEN WALK, WATERMAEL-BOITSFORT, DESIGN BY DESSIN ET CONSTRUCTION



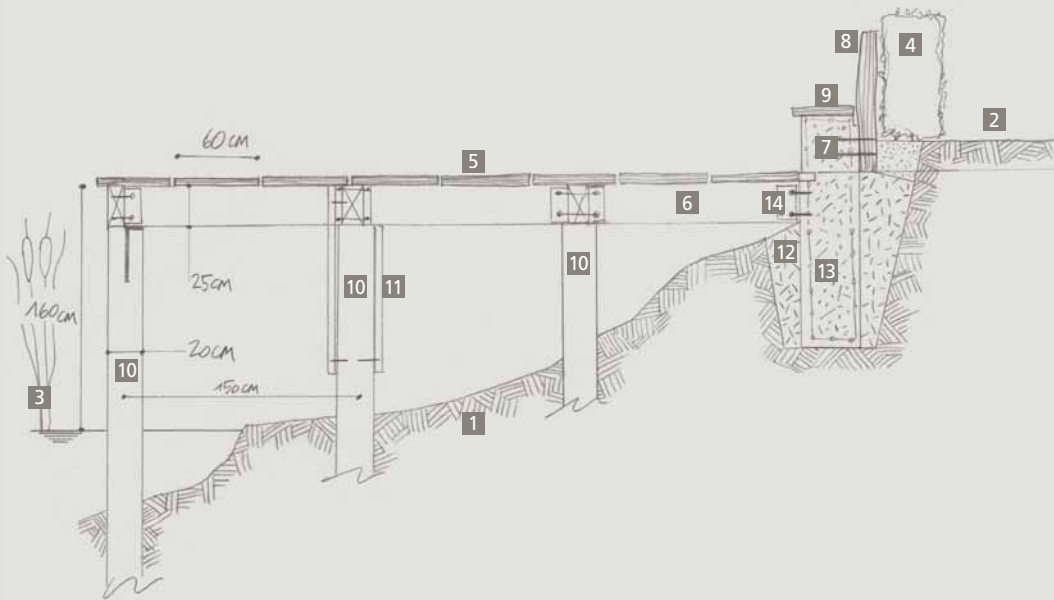


### TECHNIQUE

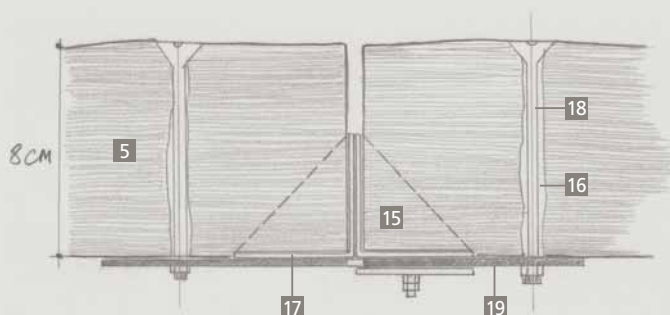
This terrace above the water rests on a very durable false acacia tree wood structure (class I/II). The floor, made from schist paving, is fastened to a galvanised steel structure. The slabs are held between galvanised angle irons fastened to the structure. Part of the paving is laid on the floor in the classic fashion : the joints are then overrun by moss.

### STONE

On the pontoon, schist is used in 8 cm thick slabs measuring 59 cm x 78 cm. For the terrace laid on the ground, the slabs are 14 cm thick. Schist has a very good deflective strength, similar to that of resinous timber, and is thus very suitable for this type of project where people are walking on paving laid down above a "void volume". The slabs on the floor are cleaved and are irregular in appearance, retaining the rainwater, which forms ever-changing patterns. Schist is also used for the backs of the bench against which this pontoon rests. It is cleaved on the visible face but honed on the cut, which gives it a dull grey, uniform colour which contrasts with the uncut, bluish face.



- 1 floor in place
- 2 path
- 3 pond
- 4 hedge
- 5 schist slabs, 590 x 780 mm, 80 mm thick
- 6 primary structure – wood
- 7 earth-coloured bench made from scraped concrete
- 8 rear made from cleaved and polished schist, 100 mm thick
- 9 schist seat, 1% slope
- 10 turned wood piles
- 11 wooden wind bracing
- 12 stabilised sand
- 13 reinforced concrete
- 14 shoe



- 15 metal angle iron
- 16 epoxy adhesive
- 17 polyurethane sealant
- 18 screw, nut and locknut
- 19 cleat



## A world of shapes and ideas!

# CREATIVE ASSEMBLIES

Random bond, or opus incertum as it is sometimes called, keeps its secrets well: its harmony results from the way the slabs are laid out, depending on their form and on the nature of the void existing between them (the joint). Designers have a multitude of solutions to choose from.



Patrick Verbruggen has a very modern way of designing gardens. In his rigorous compositions, he likes to make use of random bond. This style of paving allows him to create broken shapes which are very pleasing to the eye.

When a company in Malle hired him to design the approaches to its head office building, he opted for a simple look. The path which leads up to the door of the building becomes a concrete esplanade – essentially practical. To conceal the car parks, the landscape artist created a series of earth nipples, well designed and covered by beautiful, tender green turf, which provides a pleasing contrast with some of the building's walls, which are painted in a stimulating vermillion shade of red. The random bond paving serves to link the car parks with the entrance and to give the paths an original and dynamic touch. It is integrated with the turf and with a fine gravel surface. In the rain, the contrast between the mirror effect of the stone and the dull aspect of the gravel or the turf is very interesting: the winding paths then stand out strongly in the landscape – and make you forget the raindrops!

➤ PRIVATE GARDEN, MALLE, DESIGN BY PATRICK VERBRUGGEN

## STONE

Patrick Verbruggen often uses blue limestone in his gardens. In this layout, the flagstones are 5 cm thick, since they were intended to be bigger. A thickness of 4 cm would have been perfectly adequate. They have a ground finish so as not to make them too slippery.



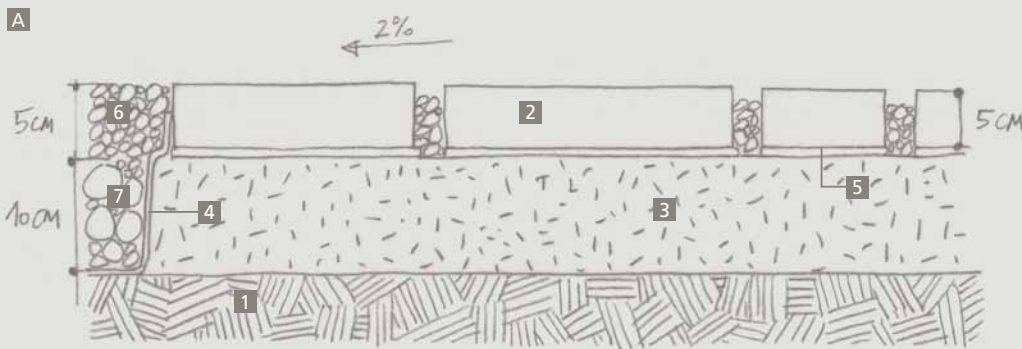
## TECHNIQUE

The paths within this space have been laid out using slabs which have been slightly re-cut in situ. Their positioning in the path is determined on a drawing and marked out in situ.

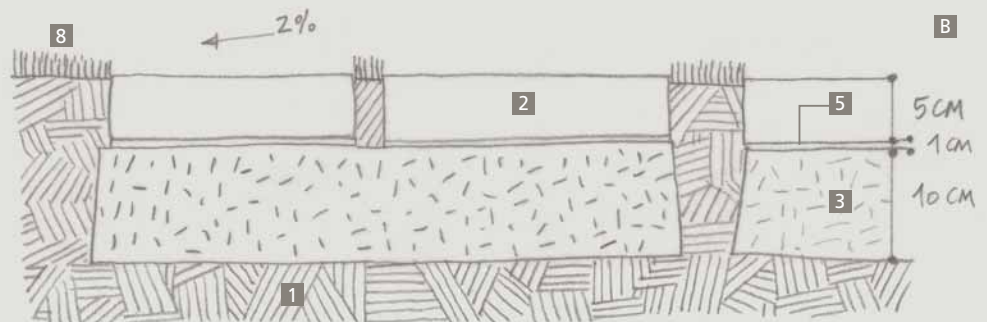
**A** To carry out the random bond on gravel, a foundation was laid down across the width of the path: 10 cm thick stabilised sand was used on compacted formwork. The stones were laid on the correctly levelled foundation

using water-resisting mortar. The edge stones were installed in such a way as to mark out the path's width in as regular a manner as possible. The joints are deliberately wide here. They are filled with crushed gravel which is very slightly below the level of the paving. The gravel spreads out on both sides, supported by well stabilised sand and a geotextile web. A 5-cm layer of gravel makes it possible to walk comfortably.

**B** As regards the path at the centre of the turf, the basic concept was similar, but the stabilised sand was laid only under the slabs. The "marking out" was thus a little more precise, with a 15-cm deep soil cut-out under the position of each slab. The stabilised sand foundation was laid down onto compacted soil. Then the slab was laid with mortar. The lawn was sown once the assembly had been completed and the soil had been completely levelled.



- 1 compact soil in place
- 2 irregular paving made from grinded blue limestone
- 3 stabilised sand
- 4 load-distributing geotextile web
- 5 laying mortar
- 6 10/14 gravel
- 7 2/32 metalling
- 8 turf



# It's all in the joint

When it comes to putting stones together, it's the nature of the joint and its width which allow us to create countless varieties of image. The finer the joint, the more work there is to do and the more difficult the work is – but the result is correspondingly more interesting. Of course, the degree of sophistication which is desired depends on the

location of this paving. If it's a small-sized terrace, the game is perhaps worth the candle.

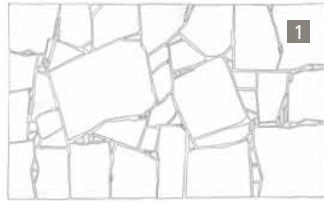
Geert Buelens and Veerle Vanderlinden are architects and designers.

**1** For this random bond carried out in blue stone, they worked with rough sawn slabs. They first placed the most regular elements

on the periphery. Then they interposed some large slabs, positioned obliquely, at the centre, the resulting space being filled by small fragments. This is very subtle work, for which the stones are laid down little by little, in an attempt to create constant harmony, before they are definitively bedded in.

**2** Taken to its extreme, this work requires only very fine and regular

joints. It is then necessary to re-cut each stone in situ, millimetre by millimetre, so that they fit together perfectly. It's a job for a professional, and this work is good enough to overcome the difficulties!



PRIVATE GARDEN, IXELLES,  
DESIGN BY EER ARCHITECTURAL DESIGN



PRIVATE GARDEN, OVERIJSE,  
DESIGN BY EER ARCHITECTURAL DESIGN

## Material effects

Random bond can take many different forms, depending on the stone used. As regards the materials, sandstone, schistose sandstone and schist are equally as good.

**1** Fontenoille sandy limestone for a wide border.

ROUGE-CLOÎTRE ABBEY,  
AUDERGHEM, DESIGN BY JNC  
INTERNATIONAL



**2** Schist and gravel surrounded by schist borders.

PRIVATE GARDEN, AUDERGHEM,  
DESIGN BY BERNARD CAPELLE/  
LANDSCAPE DESIGN PARTNERSHIP



**3** Clear random bond made from schistose sandstone, interspersed with cords of blue limestone.

CRIE OF SAINT-HUBERT,  
DESIGN BY ATELIER D'ARCHITECTURE  
GRONDAL & ASSOCIÉS

**4** Condroz sandstone.

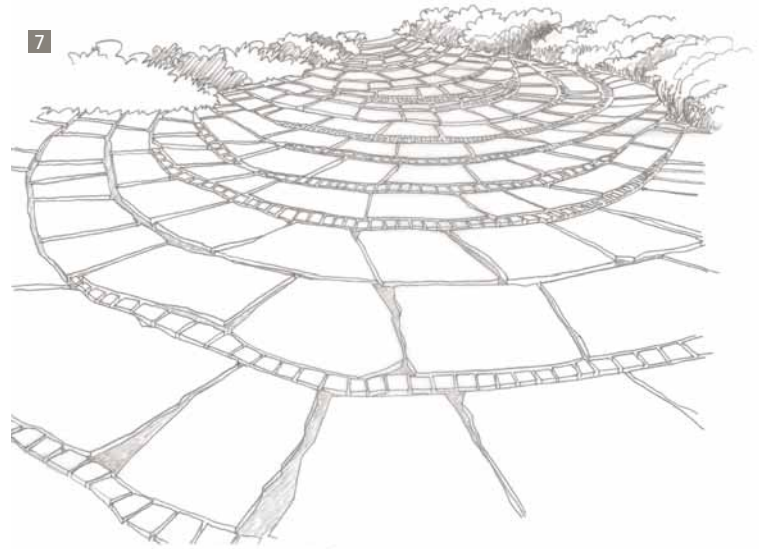
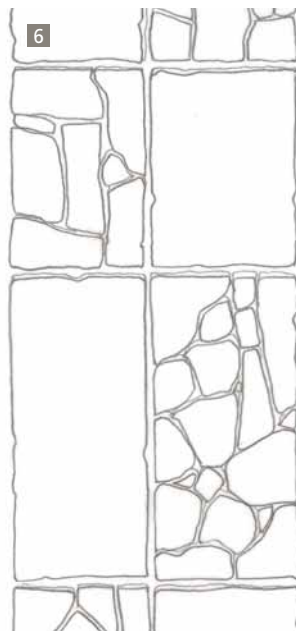
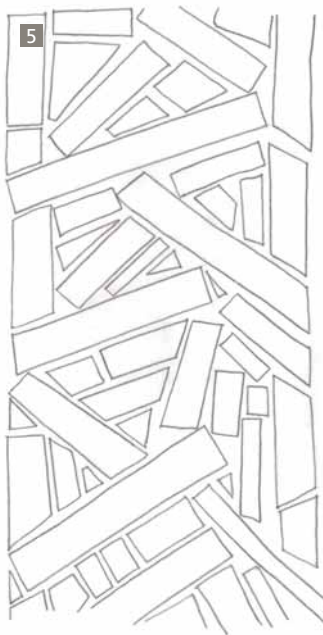
PROVINCIAL ESTATE, CHEVETOGNE,  
DESIGN BY FONDU LANDSCAPE  
ARCHITECTS





- 1** Random bond as a terrace or a carpet.  
PRIVATE GARDEN, LILLE,  
DESIGN BY  
PATRICK VERBRUGGEN
- 2** Japanese-style inspiration for confrontation of stones and layouts.  
GIANTS' PARK, EURALILLE (F),  
DESIGN BY MUTABILIS
- 3** Wide path through the grasses.  
PEGASUS PARK, DIEGEM,  
DESIGN BY MICHEL PAUWELS
- 4** Random work for base course for a monumental sculpture.  
EUROPE ROUNDABOUT,  
WATERMAEL-BOITSFORT,  
DESIGN BY MAURO STACCIOLI

## Variations on a theme

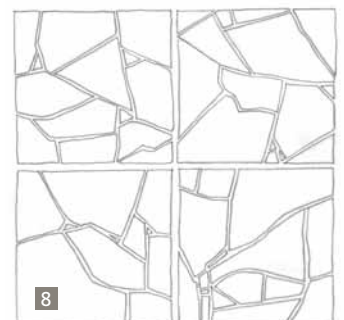


**5** Public garden in Paris: the stones selected are slab offcuts which have been re-cut into elongated rectangular shapes. They have been placed in such a way as to produce the effect of a border on either side, occasionally interrupted by an oblique slab.

**6** Observed in Japan: Japanese tradition very frequently makes use of random bond slabs. Here there is an alternation of random work and rectangular slabs to give a narrow, straight path.

**7** Random bond mixture, with large slabs and mosaic paving-stones.

**8** Garden in Courtrai: from the thirties and forties up until the sixties, random bond was often used for paths and terraces. This layout brings together geometry and broken lines to create an original entrance to a road.



# Little unsuspected treasures

## DIVERSIONS

Landscape gardeners were undoubtedly the first to wander through natural stone quarries looking for unconventional materials. And their search was not in vain...



When Hughes Fernet visits a schist quarry in the South of the country, he is greeted as a neighbour. He's a fan of this dark stone, and knows how to make use of its multiple qualities. He is continually experimenting in his garden or in his customers' gardens with new ways of integrating this stone into floors or into the other elements of his creations.

This is why he now currently uses schist waste, the "flakes" which are a product with "oodles of uses". Spread and levelled like gravel on a well tamped bed, they constitute decidedly unconventional path bases and tracks – very dark, very shiny in the rain, and also steel grey if they are dry, which brings out the foliage and the range of greens. Hughes Fernet packs these flakes in tightly between borders made from upright strips of schist, or else uses them to create little squares bordered by hazel fences.

When positioned on a clump of shrubs or in a flower bed, they can also become mulch, since they constitute an effective weed-resistant barrier and a growth factor for plants, since they rapidly accumulate heat.

› PRIVATE GARDEN, SENSENRUTH, DESIGN BY HUGHES FERNET/LE BOUILLON BLANC



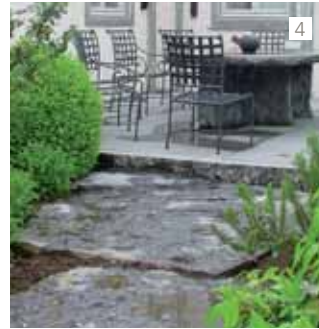
## Observers' discoveries

The first discovery was doubtless the use of the blue limestone crust, a disparaged material of almost no value, for remarkable rough bases. But the search is still going on!

**1** Some slab cutting waste caught the eye of architect Laurent Vermeersch while he was strolling through a blue limestone quarry. This small-sized cutting waste was parallelepipedal in form, like little sticks, and one looked very much like another, but there was something interesting about them. He had the idea of using them as decorative elements to cover the floor of a patio. The effect was amazing, with the tonalities of the stone varying, depending on the atmospheric humidity, and contrasting with the steel of the walls of a quite cramped courtyard. PRIVATE GARDEN, FLOBECQ, DESIGN BY LAURENT VERMEERSCH



**2** In a quarry, flagstones are sawn off while the saw is supported by a wide slab, which is regularly cut by the saw wheels. After a large number of cuts, the support wheel is striated by lines and reliefs which occasionally cross each other in what is very much a contemporary pattern: reject stone, which would look good encrusted on a floor, like a strong pattern made from another surface.



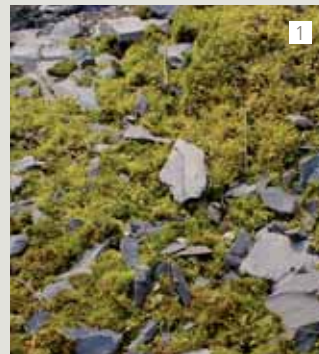
**3** Modern floor made up of small blocks of blue limestone. PRIVATE GARDEN, BEVEREN, DESIGN BY FONDU LANDSCAPE ARCHITECTS

**4** Blue limestone crust flush with the ground.

PRIVATE GARDEN, HAUT-ITTRE, DESIGN BY JEAN DELOGNE

## From nature to sophistication

Schist is a rock which has a special feature – it has a laminar look, and it can be cut up into fine sheets or “rock sheeting”. The floors of schist quarries are strewn with these little chips, which are scaled off during quarrying. All you have to do is pick them up. Of course, these “flakes” don’t last for ever, but they certainly last long enough to create a gravel surface which needs “reloading” from time to time.



**1** In the natural state, schist mixes harmoniously with mosses, leaving it to our imagination to create our own designs.



**2** Schist flakes can be combined with brick dust and box trees to create patterns inspired by embroidery pictures of classical gardens.

**3** On flower beds which it protects against weeds, and flush with the surface of a path, schist is simply... a natural!



## Stone encroaches and puts you off the trail!

# COMBINATIONS OF MATERIALS

Can you make a wooden surface surprising? Small touches of stone can light up a simple material and make people look.



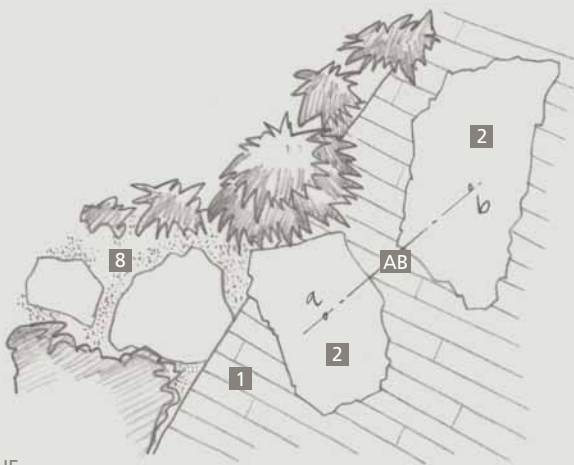
Michel Famerée doesn't work to drawings. He designs his gardens himself, with two or three other men to help. For this project in the heart of Brussels, he has created a luxuriant landscape which can be admired from a wooden terrace. This is crossed by a stone pathway, which comes to an end not far from a blue limestone fountain. For this instinctive landscape artist, "it's the stone that makes you look at the plants – it's the plants that make you notice the stone".

As usual, Michel Famerée always takes as much time as he needs to find his stones, strolling through quarries looking for those which will give the best effect. When he's found the right blocks, he enlists the aid of the driver operating one of the enormous bulldozers to guide the shovel delicately enough to pick up the blocks he's earmarked a few hours earlier. You can't play about with them, as though they were wisps of straw. The stone must come out of the operation unharmed.

Once in the garden, Michel Famerée examines each stone, re-cuts it, and makes sure that its dimensions are well suited to the wooden terrace which he has just created. And a few days later, there's a "Japanese walk" all over this terrace, which seems to emerge gently from the wood, as if it were strewn with the shells of sunbathing turtles.

➤ PRIVATE GARDEN, IXELLES, DESIGN BY MICHEL FAMERÉE/HERBE ET FORÊT





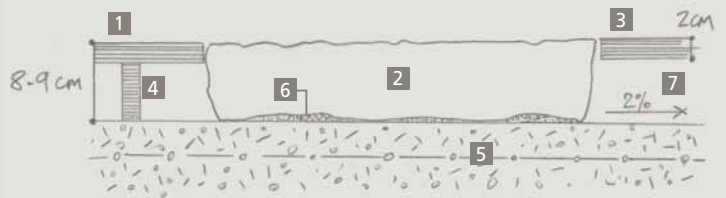
#### TECHNIQUE

The slabs are re-cut by hand, in such a way as to give them a rather flat, aesthetically pleasing shape, in spite of the rough areas which naturally occur in the blue limestone crust and which give it its charm. The crusts are often thicker than the standard slabs sold on the market – it's not unusual for them to be 10 cm thick. For this garden, the thickness was limited to 7-9 cm – first of all, to reduce the weight of the slabs to be transported and positioned, but also to adapt to this type of construction work, which definitely needs a lot of precision. The slabs are long enough (80-90 cm) to ensure that when you walk on them you can plant each foot on the middle of a slab every time. Take the length of a man's stride (about 67 cm) and add the space desired between the stones, and that gives the width. The number of slabs needed is determined in situ by simulating the desired route.

When the concrete foundation which keeps the terrace stable is installed, Michel Famerée marks out the places where the stone slabs are to be positioned. He makes sure that the surface of the concrete is perfectly horizontal at these points. The wooden terrace is then installed, slightly higher than the concrete foundation material onto which the rainwater drains. The stone slabs are then placed onto the terrace one by one, and their contours are meticulously cut out using a jig saw. While one of the men cuts out the wooden surface, the others remove the wooden strips, one by one. Once the cutting is complete, each stone is gently lowered onto the concrete and laid in a stable position, with the help of a little sand if needed. The stones are not sealed, but are simply lying flush with the terrace in such a way that they are comfortable to walk on.

#### STONE

The blue limestone used here comes from crusts carefully selected from quarries in Soignies for its blue colour – a colour which changes attractively when it rains. Searching for attractive blocks in a quarry is always a matter of time. You sometimes need two to three days before you find exactly the materials you're looking for.



- 1 wooden terrace
  - 2 blue limestone crust slab, slightly re-cut, 70-90 cm thick
  - 3 wooden lath, 20 mm thick
  - 4 floor joist
  - 5 concrete foundation
  - 6 sand
  - 7 space for water drainage (approx. 60 mm)
  - 8 continuation of japanese stepping stones in garden
- AB = length of a step = approx. 670 mm

## Stone and wood

Stone and wood often go well together, no doubt because they are two natural materials which have always been used in gardens. Other landscape gardeners have worked on this combination – inserting stone into wood always requires a little technical effort. Precision is required, in particular, in the cutting operations, the fitting together or the framing. Two things

have to be kept in mind. One is to make sure that water does not stagnate on the wooden surface. The other is to consider all the implications of the various phases of construction. It's often practical to be able to remove a strip of wood to clean the underside of a terrace. Make sure that no stones are positioned on top of this strip, which would make cleaning difficult.



1 Here, the wood is acting as a frame for the insertion of slabs.

PRIVATE GARDEN, ITTRE, DESIGN BY JARDINS IDÉES Ô

2 Stone step which precisely marks out the descent to the path at the bottom of the wooden terrace.

PRIVATE GARDEN, DESIGN BY CHRISTIAN DEVALLÉE



## Stone grooves

How do you make concrete look better? Stone gives it a contemporary look and counteracts banality. Serge Delsemme takes care over the smallest details which can give a unique touch to a layout. In Vielsalm, he has designed a garden in which schist (a traditional material in the region) is the fundamental element, reinterpreting old ways of using stone in a modern manner. Here, a terrace made from coloured concrete adjoins the garden-side façade of the house, and is extended by a flight of steps towards another part of the garden. This large expanse, which was a bit monotonous, has been transformed by the integration of some stone “grooves”, which break it up with some darker areas and add some pace to what could have been a banal-looking surface. Laying schist on its edge in this way recalls the old architectural features around houses in the region which once served to drain rainwater away rapidly from the bases of walls. These wide lines of stone, bordered by Corten steel, scan the surface. This impression is continued by risers, also made from Corten steel, which climb up towards a new orchard. What we have here is a little touch which simply and effectively improves the concrete, which would otherwise have been decidedly classical.

PRIVATE GARDEN, VIELSALM, DESIGN BY SERGE DELSEMME

### TECHNIQUE

#### STONE

Purplish schist from the region is used in arrows about ten centimetres wide, by a variable length and thickness. Laid on their edges in their final state, these sawn stones display a comfortable surface.

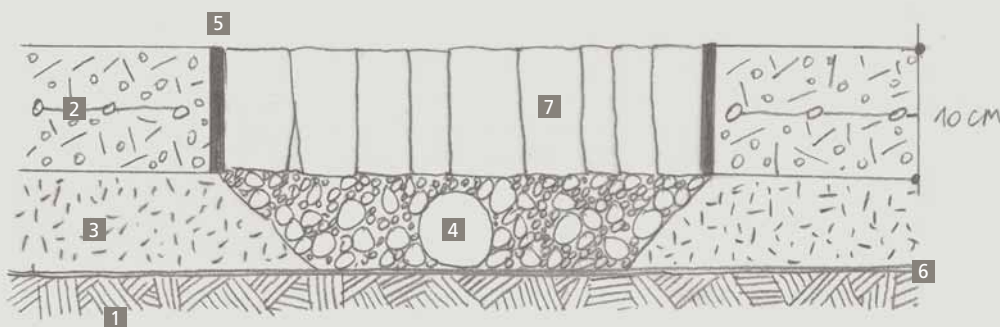
The through-coloured concrete is initially produced, with spaces being left to position stone grooves. Once the concrete is dry, drainage is installed at the bottom of the foundations, in a rough bed or a layer of slag. The two Corten steel borders which are to retain

the assembly are then positioned along the concrete. The schist arrows are then laid on the slag, wedged against each other.

The stones are assembled in such a way as to vary the thicknesses, the shades and their layout, in order to avoid any transverse alignment.

The stones are re-cut at the ends to the width of the path and retained by stabilised ground which shores up the assembly.

- 1 compacted ground in place
- 2 slab made from coloured and smoothed concrete
- 3 stabilised sand
- 4 drain surrounded by geotextile
- 5 corten steel 15 mm thick
- 6 geotextile
- 7 sawn schist slivers



# Glossary

## Bond

The way in which stone elements of a surface or a wall are arranged. Opus incertum or random bond is a bond forming an irregular pattern.

## Cleat

A piece of hardware acting as a support to secure a square.

## Cutting

All the techniques used to form a pre-designed geometric shape in a block of stone which is generally integrated into a bond of cut stones.

## Damp-proof

Protects against the incursion of water and damp.

## Flagstone (for outdoors)

A parallelepiped of ornamental natural stone whose dimensions are standardised (length > 150 mm and  $\geq 2 \times$  thickness).

## Finishing

Manual or mechanical surface treatment, which makes it possible to work the surface of the stone to obtain certain effects. Limestone, particularly blue limestone, can be treated to offer twenty or so different finishes, suited to each purpose.

## Joint, pointing, to point

Treatment of brickwork so that the joints are flush with the facing. This pointing operation provides stability and can be carried out using cement mortar.

## Kerb (outdoors)

A parallelepiped of ornamental natural stone whose dimensions are standardised (length  $\geq 300$  mm).

In general, people try to have the finest possible kerb in a garden.

## Layout drawing

A very accurately dimensioned detailed sketch or drawing with the specifications of the pieces to be produced and the pattern in which they are to be arranged.

## To draw layout of joints, joint layout drawing

To draw, according to the architect's plans, while finding a good compromise between the architect's wishes, the dimensional options offered by the stones and the objective of keeping costs low by repeating dimensions. The joint layout drawing must contain all the technical details required for the cutting of the stones, followed by their laying.

## Opus incertum (Random bond)

(from opus, Lat. work) Bond of non-geometric, rough-shaped flagstones in cement or bedding mortar.

## Paving stones (for outdoors)

A parallelepiped of ornamental natural stone whose dimensions are standardised (thickness  $\geq 50$  mm, length and width  $\leq 2 \times$  thickness).

## Roman bond

Bond of rectangular and square, geometrically shaped flagstones of different sizes.

## Slag

In the iron and steel industry, slag is a metallurgy by-product, containing metal oxides, mainly silicates, aluminates and lime, which are formed during the smelting or refining of metals through a liquid process. It is used, in particular, as aggregate.

Our thanks to the garden owners and project designers who spared us a little of their time and agreed to be published.

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This notebook is devoted to the use of stone for **SURFACES**. It is the fruit of attentive meetings, warm visits and lingering looks at the gardens surrounding us and presents achievements chosen for their originality or their classicism, their simplicity or a specific construction detail. Works of landscape designers who like to share their creative outbursts or their experiences, they invite us, above all, to step in and enjoy garden tales.

The collection **STONE IN THE GARDEN** is intended to be a practical discovery tool for garden architects and landscape designers but also for the simple garden lover. Many and varied ways of incorporating stone into the realm of the garden are proposed on the basis of projects implemented by Belgian landscape designers and presented in a detailed manner.

For 20 years, **PIERRES et MARBRES de WALLONIE** has been disseminating accurate and detailed information about all the facets of stone in Wallonia: history, products, traditional and contemporary uses, technical expertise, restoration, documentation, etc.

STONE IN THE GARDEN  
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