





VANDE MOORTEL BRICKS · SLIPS · PAVERS

UNIQUE COLOURS & SIZES

shaping places

Dear reader,

The reason we publish our 'Shaping Places' magazine is to pay tribute to the many beautiful and unique projects that you realise using our products.

In this edition, we make an exception for once. As many of you will already know, in 2020 our company moved into a new office building: one that embodies our past, our present and also our vision for the future. Not only are we rightly proud of this but we are also delighted with the numerous positive reactions that we have received.

This investment has been a source of inspiration for Vande Moortel, as well as a bright spot during these strange times we are in. We are excited to explain the concept to you and in doing so, our vision will also become clear. We will also focus on the added value for both visitors and personnel and practice-oriented solutions, sustainability and a wealth of inspiration are just a few of the key concepts that will be discussed.

As far as this project is concerned, our conclusion is that we can be proud not only of our modest contribution but also of the overall result. We sincerely hope to be able to welcome you soon so that you can experience it for yourself!

I would also like to thank all the partners who have made their own contribution.

Peter Vande Moortel





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A permanent concept store

The showroom building which forms part of an architectural composition of volume and functions has been designed as a concept store by drawing on its functionality. It is from here that the production of facing bricks and clay pavers is controlled and support is given to all the parties involved in projects using these products. When you look at the building, you can see in an instant what its purpose is and what you can expect to see during your visit. That is because the architects took the product and the range as the main sources of inspiration when designing the concept for this building. Then they also examined their own ideas as to what they would expect to see if they were visiting a brickworks.

As a result of that exercise, the whole range of facing bricks and clay pavers was incorporated in the design of both the interior and exterior, enabling all our products to be viewed in natural light. Another plus point is that as a result, the showroom is no longer tied to office hours and to staff being present.

You enter the new building via the incision between the old sheds of the brickworks and the new showroom which really catches the eye and immediately reveals the identity of the user. Old and new are brought together by a transparent link, with the offices functioning as a connecting element within the brickworks.





Architectural landmark

The balanced rhythmic architecture in conjunction with the interplay of colours will stick in the mind of every visitor or passer-by. Both the building and the functional space around it have been designed with the utmost respect for the Scheldt valley.

"Brickworks Vande Moortel is in a fantastic location between old warehouses along the Scheldt. The idea was to build a warehouse on the bank of the river, a landmark that you could see from miles away which also had a clear identity and no hidden agenda. We chose a pure, rectangular shape and a steel skeleton structure, dimensioned at 2.5 m, in order to reinforce the impression of the port architecture. This building has become a real landmark in the region." (architect Thierry De Vos)





A patchwork of ceramics





As the whole extensive range has been included in the interior and exterior of the building volume, the architects were faced with the major challenge of achieving this integration in a clear and composed manner.

In the end, they opted to use the pure, rectangular shape of a brick or clay paver and a powerful rhythm to present the range. The architects were able to keep the concept clear and transparent by choosing that simplicity and the clarity of the chequerboard motif.

The showroom concept is unique in Belgium and is always open to visitors.

© Cafe

Logical positioning within its surroundings

The building is obviously positioned as a warehouse on the bank of the Scheldt and therefore feels familiar in that location. For that reason, the immediate surrounding area was approached based on a vision identical to the vision for the building itself. Over time, these will grow and provide the whole site with sufficient shade, forming a green roof that will significantly enhance the quality of the environment both visually and in terms of use. Low red beech hedges were planted in long rows to clearly define the various zones and keep up the rhythm. A single decorative line flows through the whole sleek concept, naturally guiding visitors to the entrance of the building.

"Because of their function, industrial sites of this type are often very bare and unattractive. By choosing a combination of numerous trees and other greenery along with a natural paving material such as clay pavers, we have succeeded in creating a pleasant and tranquil whole. We deliberately opted for warm browns and yellow shades which go well with the colours of the trees and shrubs we selected, creating a cohesive whole. Even the busy central road to the storage area forms part of that whole. This, together with the attention that we paid to the infiltration of rainwater and the use of circular



The clear rhythm of the building volume was extended to the surrounding outside space which comprises four main functions: a display park, the entrance to the building, a parking area and the busy entrance and exit road to the storage area behind.

Directly adjacent to the building, the strict rhythm of the façade is reflected horizontally in the show park. Here, the glazed sections are replaced by lawns and a variety of colourful playful plants which gently break up and soften the motif. The straight lines then continue into the numerous parking areas provided adjacent to the building. These have been designed to be water-permeable by using milled clay pavers as paving: a circular application for clay pavers which can no longer be reused as such. The parking areas were planted with a combination of planes and tall red beech trees.

material, led to a thoroughly sustainable result." (landscape architect Martin Wirtz)



landscape architect Martin Wirtz

The desk was constructed solely using brick slips. In the hall, slips were used for both the walls and the floor.

One block of inspiration ^{© Marc Scheepers}

Not only does the building show off our full range of products, it also demonstrates how versatile ceramic facing bricks and pavers are. Over the past few years, both have become increasingly popular for use in interiors and have been processed based on a variety of techniques.

"Designers have been using our products for not just classic but also modern applications for a long time now and we want to continue to help them do that. You can see a specific application or accent in every corner or space. Due to their physical characteristics, our facing bricks and clay pavers offer an infinite number of creative, architectural possibilities. They offer sophisticated aesthetics for both internal and external use." (Peter Vande Moortel) In order to enable all the elements constructed using facing bricks or clay pavers to create maximum impact, a sober combination with different materials and colours was chosen. Concrete, glass and black lacquered steel are used the most and enable all the areas constructed using facing bricks and clay pavers to create maximum impact.

"An industrial concept with an eye for detail, where the honesty of the structure and the materials are clear to see, so that the urban development and integration of the architecture in the surrounding area focuses attention on the brick and clay paver products." (architect Thierry De Vos)



This imposing wall was finished by applying the special chipper jointing technique. The floating staircase leads to the bar and the lounge corner.



architect Thierry De Vos









Brick lab



Every facing brick and clay paver used also forms part of a research project. That is because the building also serves as a knowledge centre where both users and visitors can learn more about the products and their applications. Inside the building, visitors are taken on a walk where they can discover all the company's products as well as the history of the brickworks and find out more about every aspect of the brick.

"We are working intensively on research projects. For instance,

all paver zones are created using a specific composition and their load-bearing capacity and water permeability are tested. All knowledge is housed at the Ceramic Knowledge Center where it can be consulted by architects, consultancy firms, public authorities and developers. We want to continue to shape and structure the project support we provide from the CKC. As manufacturers, now more than ever we are a partner who will be there for you every step of the way and that calls for the right infrastructure. Our research on sustainability will also be kept there." (Peter Vande Moortel) In this way, the building will increase the involvement of all employees with the products of the brickworks. The range will become tangible for everyone and from the CKC, employees will also be trained and involved in programmes focussing on sustainability, circularity and ecology.



The sustainable result of sustainable

Essentially, ceramic facing bricks and clay pavers are made from natural raw materials. They have a life expectancy of more than 100 years and can even be reused several times, making them one of the most sustainable building materials available.

In order to further optimise the consumption of raw materials and energy, Vande Moortel has launched an extensive range of 7 cm ecological facing bricks and clay pavers. The positive ecological impact of this initiative has only increased as a result of other manufacturers following our example.



production



Brickworks Vande Moortel remains the natural pioneer of the ecological Brick7 format

More space for insulation or living

- An optimised price-quality ratio
- Can be processed using known bricklaying techniques
- The same quality and lifespan as a conventional brick
- Less weight to transport
- Fewer raw materials used for production
- Lower energy consumption during production
 and transportation

Investing in sustainability

Brickworks Vande Moortel uses efficient tunnel furnaces to which we also owe the high quality of our facing bricks and clay pavers. Over the past three years, we have completed an intensive investment programme which involved replacing two old furnaces and completely overhauling two other furnaces. This resulted in the optimisation of our energy demand which has been drastically reduced. In addition, the residual heat that is still released during the firing process is made the most of by using it to dry the compacted facing bricks and clay pavers. Circular principles are the main aim in all aspects of the production process: from the raw materials to the end product, the key rules are 'recycle' and 'zero waste'. Throughout the production process, waste production is reduced to a minimum and residual products are reused as raw materials.

In 2010, we took the decision to invest significantly in sustainability. A new loading quay saves the use of 3,000 trucks a year, providing a solution to the traffic congestion problem. We transport around 75,000 tons of goods via our inland waterways per annum.

Sun, wind and water: special attention for renewable energy with the aim of

At the start of 2021, we completed the installation of 2,200 solar panels on the existing production buildings. With an installed capacity of 830 kWp, these can generate an output of 797 MWh per annum which is equivalent to the combined annual consumption of 230 Flemish families. Brickworks Vande Moortel currently uses renewable energy to cover approximately 10% of its total consumption. 100% renewable energy must be the goal.

"It is a useful next step for us but certainly not the end of our journey," says Peter Vande Moortel. "The more genuinely renewable energy we can generate, the better. We are looking at sun, wind and water for our next options. In the future, we will definitely be adding further solar panels but wind and water also offer possibilities. We are working out all possible options and will implement them step by step. It will take a lot of effort on our part but ultimately, both we and the environment stand to benefit from our commitment."

the unit of

CO2 emissions

The combined power generated by the 2,200 solar panels is enough to cover the annual consumption of 230 families.



We are an active member of three green deals. Within this learning network, we already have five projects on the go which we will look at in more detail below.

Within this innovative learning network, Brickworks Vande Moortel is committed to sharing practical experiences with other construction companies, producers of construction materials, local and regional authorities, private developers, researchers and other organisations. Until 2023, we will be setting up experiments together in order to test the circular principles in practice and exposing sticking points: a great lever for the circular economy in Flanders. Within this Green Deal, a multidisciplinary research group – Circular Construction Living Lab – will be working on eliminating these sticking points.

Building with circular brickwork

In order to optimise the circularity of brickwork, alternative mortar compositions consisting of natural and environmentally-friendly materials are being tested. Besides masonry mortar, there is also a need for a jointing mortar that can be included on the list of circular building materials.

All mortars are assessed based on composition, technical characteristics and processability, with the aim of enabling new brickwork to be dismantled at a later date and all the materials to be recovered and used for building new façades.





The circular garden

We are going to be supporting and documenting a number of garden make-overs in conjunction with the Belgian Federation of Landscapers. The intention is to reuse all the materials present, including clay pavers, but not necessarily for their original function. In this project, we also want to find out the ideal approach to take when laying paving in a garden in order to make this process easier in the future. Generally speaking, we want to minimise the flow of waste and reuse all materials and we are going to do that based on two principles: reusing products and repurposing (urban mining).

<u>Via two principles:</u>

- reusing products

- repurposing (urban mining)

a number of n Federation Waste from brick and clay pavers obtained through urban mining or other applications has the same qualitative

characteristics as first choice products. This project is to investigate the possibilities of breaking up bricks into coarse rubble so that the material can then be given a new purpose by reusing it in the construction of paved surfaces. Focus will be directed towards their possible use for the construction of water-permeable paving.

Urban mining: building waste as a

foundation layer for paving





SHARE OF CONSTRUCTION INDUSTRY IN EMISSIONS AND RESOURCE USE





Recovery of secondary clay and loam

In this project, we have been evaluating clay and loam released during infrastructure works for the purpose of using them as raw materials in the production of facing bricks and clay pavers. The largest case is that of the lock in Kerkhove. BRICKWORKS VANDE MOORTEL RECOVERS RAW MATERIALS RELEASED BY MEANS OF SUSTAINABLE TRANSPORTATION VIA THE SCHELDT

Because the locks in Kerkhove urgently needed to be replaced, it was decided that they would be updated and duplicates would be removed. The large quantities of soil that were released during these works are now being given a new life in Oudenaarde. And the icing on the cake: all the associated transport activities have taken place via the Scheldt. In total, around 72,500 m³ of raw materials will be recovered. Transportation via the Scheldt has eliminated the need to use 5,200 trucks which would have significantly increased the level of traffic on the local roads in and around Oudenaarde.

RECOVERY OF RAW MATERIALS AND SUSTAINABLE TRANSPORTATION

This initiative – a joint venture with the local authorities and Flemish Waterways – has enabled Brickworks Vande Moortel to combine two of its environmental objectives: to maximise the use of secondary raw materials and to use sustainable transportation via the waterways.



Industrial residual materials as secondary raw material instead of primary clay and loam

Facing bricks and clay pavers are traditionally made from clay

CIRCULAR CONSTRUCTION

and loam, 100% natural raw materials which are extracted. In this section, we look at how we can use residual materials from other production processes as a replacement for these primary raw materials. Therefore by using industrial residual materials as our raw material, we can reduce not only a certain waste flow but also the demand for primary raw materials. The condition is, however, that they do not contain any harmful substances or reduce the circular character of the end product.

/ WINK



Green deal Natural Gardens

We support the Green Deal Natural Gardens along with all the interest groups from the gardening sector. This project is an initiative of the tuin+ knowledge centre at Erasmus University and is supported by us and all the other interest groups from the sector.

There are more than 2 million gardens in Flanders which together cover 9% of the land in the region. That area can be used to increase biodiversity in Flanders. Therefore in the first instance, the initiative wants to create a basis for this within our sector. On Friday 13 November 2020, Flemish Minister of the Environment Zuhal Demir officially kicked off this project via an online event.

The objectives of the initiators and the 100 companies already involved are:

- to increase biodiversity in Flanders
- to use gardens to help tackle the drought problem
- to introduce circular principles in garden design

GREEN

DEAL

 to create a sustainable green zone from all the gardens together



NATURAL GARDENS

Green Deal Companies and Biodiversity



This Green Deal should increase biodiversity at industrial sites and strengthen the basis for doing so. By redeveloping our surroundings, we have turned an industrial site that used to be entirely paved with concrete into a modern functional space that shows respect for nature.

In total, more than 200 trees were planted and waterpermeable paving was laid. Within this learning network, we are also looking at how old mining areas can be opened up to increase biodiversity. Plants used: Carpinus betulus, Ginkgo biloba, Parrotia persica, Platanus x acerifolia, Prunus Umineko, Euonymus fortunei, Ilex crenata 'Convexa', Sarcococca confusa and Buxus sempervirens.





The proud Vande Moortel team at the 'kick-off'





Photograph above: putting in columns, from L to R Dave Beuten (CEO Gijbels), Thierry De Vos (architect), Peter Vande Moortel, Marnix De Meulemeester (mayor of Oudenaarde)









In total, 128 show areas presenting facing bricks and clay pavers were constructed on both the inside and the outside of the building.













© Marc Scheepers

ROUGH AND PURE CHARACTER • REAL COAL FIRE EVERY BRICK IS UNIQUE • HANDMADE PROCESS STRONG AND NATURAL VARIATIONS OF COLOUR

-IAND-MADE

Our Hand-Made Bricks have a **pure and authentic character**. In one single production run, there are many natural variations of colour as a result of the reduced firing process with varying levels of oxygen. These shades are apparent between the different bricks as well as the different sides of the bricks. Because they are handmade, every brick is unique. The **manual production process** gives the bricks rough contours and faint stripe patterns. The burn marks on the bricks are also obtained in an authentic way by manually scattering the coals over the bricks.

The result is a strong, subtle and very natural product.



KALIBER

[Right price/quality ratio][High frost resistance][Ecological format]

Kaliber Bricks are the perfect example of a **sleek moulded brick**. They have have outstanding technical characteristics including low porosity and high compressive strength. They are also extremely durable and frost-resistant.

They are available in our **<u>ecological BRICK7 format</u>** as standard. Due to their special dimensions and adapted depth, they leave **more room for insulation or living space**. As a result, they have all the characteristics that a modern facing brick should have. The dimensions, textures and colours available give them **a high design value**, making them ideal for contemporary and timeless architecture. The Kaliber series is produced using a **fully optimised and automated production process**. This, combined with Brick7-format, ensures an optimal price/quality ratio.

Kaliber bricks are available as standard in the **sEptEm and** linea7 series.



[Low water absorption][High compressive strength][Design value]



Our **unique rustic facing bricks** embody the centuriesold Flemish building tradition which has its origin in agricultural activities and the farms that used to dominate the Flemish landscape. This **farming tradition** gave rise to a typical architectural style. Both have a direct effect on the perception of our region and how we experience it. The **rural architecture** has also shaped the local identity and typifies our region.

During a later phase, the typical pastoral style was added, originating from the village centres. Coming over from France, the stately and prestigious Manoir style also became popular in our region.



QUALITY OF A NEW BRICK - TRADITIONAL CHARACTER

All these trends are characterised by the choice of materials, with combinations of facing brick, bluestone, wood and classic roof tiles. They all exude **cosiness** and have a **traditional and often static character**. The brick features prominently in all these styles, making them an important part of **our brick-based culture**. This tradition is close to our heart at our brickworks, which has a history that dates back **more than 150 years**, and we are strongly committed to it.

Our rustic facing bricks are the ideal building material for anyone wanting to carry on this tradition, either by following the rules of the art to the letter or with a modern nod to this tradition.

Rustique Bricks are **tumbled and often cemented**. Unlike old reclaimed facing bricks, our Rustique bricks have **all the benefits of a new facing brick** as well as a **long service life**. We meet the ecological expectations of today by offering these bricks in <u>the ecological</u> **Brick7 format**.

RURAL AND RUSTIC APPEARANCE - AGED LOOK







A new dimension within our range of clay pavers

The slim format of this brand new series of Wasserstrich clay pavers creates a powerful visual language.

Elegantia is available in 5 striking and characterful colours.





Site of office building: **1050 m²** Site incl. outside space: **7440 m²** Architect : Tarch Architectenbureau Landscape architect: Wirtz International Landscape Architects

Main contractor: NV Mathieu Gijbels Design coordinator: iVES bvba HVAC contractor: ZAMAN Groep Consultancy firm Techniques: VK Engineering Joinery: Schrijnwerken Van Tomme Kurt Interior joinery: Vossaert Keukens Furniture: Bulo Design Meubilair Photos : Cafeine; Marc Scheepers

