



WOOD BLOCK PAVERS (PROFLOW PERMEABLE PAVERS™) JOINTED WITH ROMEX® PAVEMENT JOINTING MORTAR

ROMEX® - CASE STUDY

ROMEX® GmbH
Industriepark Kottenforst
Mühlgrabenstraße 21
53340 Meckenheim
+49 (0) 2225 70954-20
www.romex-ag.de
GERMANY

ROMEX®

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NOT ONLY SMART, BUT ALSO EXCEPTIONALLY RESISTANT

The range of applications of wood block pavers is exceptionally broad, ranging from representative projects in the public sector to stylish living spaces. Originally it was primarily a popular floor covering for industrial, commercial and municipal spaces including and administrative buildings because of its high load-bearing capacity.

In addition to its extraordinary resilience, wood paving is also relatively flexible and gentle on the paver joints - more so than the joints in stone or concrete floors. In addition, there are beneficial soundproofing properties since it absorbs vehicular impact thereby reducing noise. This effect is also an advantage in busy, public buildings.

Wood block paving is also an extremely good option for living areas. After all, the flooring combines an attractive, natural look with a warm, barefoot-suitable surface.

Individual Flooring Solution with that "Certain Something".

With the exceptional wood block paving in combination with the proven ROMEX® bedding and jointing systems, you can bring a piece of nature with a "feel-good factor" into your project. Our wood block paving is made from Robinia wood. Germany's Tree of the Year 2020 has its origins in North America and has been growing in Europe for over 300 years. Robinia wood is flexible, strong and extremely hard, and also resistant

to wood rot. Since it remains stable for a long time when used outdoors without chemical preservation treatment, it is a sustainable alternative to tropical woods. Wood paving has a prominent status amongst all wooden floors. This claim also applies to the wood block paving made of Robinia wood in which the end grain surface is used as a wear and tear layer. The visual of the annual rings not only gives the floor a pleasingly aesthetic characteristic and unique appearance, but the wood grains also provide the wood paving with technical features that meet the highest requirements.

Like no other surface, this wood block paving combines high demands on resilience and functionality with aesthetic standards. The combination of wood block paving and ROMEX® bedding and joint mortar results in a very exclusive choice!

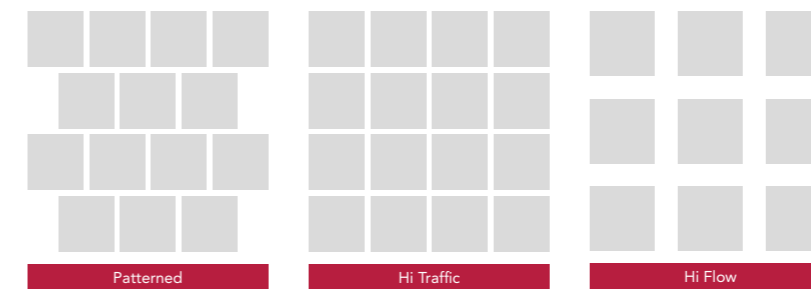
Characteristics

- 100% ecological product
- Largely maintenance-free, no rotting
- Little maintenance
- Service life of over 50 years
- Sustainable since it is a renewable raw material
- Brinell hardness 46 N / mm²
- FSC® certificate FSC-C113128
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A PERFECT SYMBIOSIS: THE ROMEX® BEDDING AND JOINTING SYSTEM

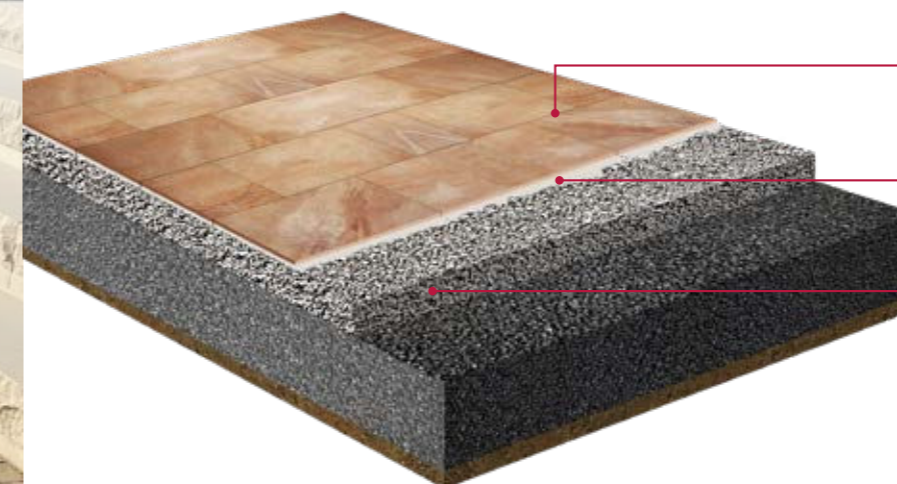
In general, interior wooden floors are usually laid without joints. There are product systems in which each wooden "paver" is laid with surrounding elastic joints. This is usually evident in tiled surfaces or cobblestones. In such cases, the joints primarily offer a visual appeal, but are not a technical necessity.

The only mandatory joints for wood paved surfaces are movement joints at the edges and in the transition to neighbouring areas as well as isolated joints for larger areas. The joints in exterior installations are often filled with sand or bitumen.



The individual Robinia wood blocks are attached to a flexible grid, or paving mat. This structure provides a specified laying pattern with a clean, evenly jointed pattern over the entire surface. By simply removing individual wooden blocks, the wood block paving mats can also be laid quickly and easily in corners or around obstacles.

The finished surface is then grouted with ROMEX® pavement jointing mortar. In addition to the classic ROMPOX® - EASY, we recommend laying the wood block paving mats onto our ROMPOX® - TRASS BED and then sealing the joints with the tough, elastic pavement jointing mortar ROMPOX® - FLEX-JOINT for an ideal sealing system.



- **ROMPOX® - FLEX-JOINT**
the viscous elastic pavement jointing mortar
- **ROMPOX® - ADHESIVE ELUTRIANT**
the secure bond bridge for slab surfaces
- **ROMPOX® - TRASS-BED**
the frost resistant drainage mortar

THE LABORATORY TEST:

In the ROMEX® laboratories, the following system setups were tested between December 2019 and March 2020 according to the CDF-Test for the freeze-thaw cycle and evaluated using the paver types "Hi Flow" (L = 7.6 x W = 7.6 x D = 6 cm) and "Micro" (L = 4.8 x W = 4.8 x D = 6 cm). One sample box of each was frozen in the freezer at -16° C, watered weekly and thawed the next day, with three parallel reference boxes placed outside and subjected to weathering.



THE UNBONDED CONSTRUCTION METHOD

Wood block paving laid in 3–5 mm grit

Fully jointed with ROMPOX® - EASY

The simplest pavement jointing mortar - colour: basalt

Consumption of pavement jointing mortar approx.:

with wood paving type "Hi Flow" = 35 kg / m²
with wood paving type "Micro" = 25 kg / m²

The Result:

The functionality is still evident; there are only gaps between wood and mortar of up to 1.5 mm. These cannot be avoided due to the "working nature" of wood, but the gaps are able to close again depending on the humidity.



Fully jointed with ROMPOX® - FLEX-JOINT

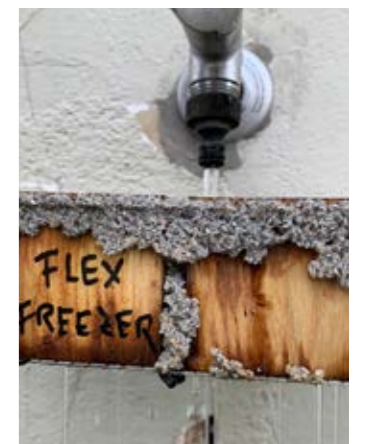
The tough elastic pavement jointing mortar - colour: neutral

Consumption of pavement jointing mortar approx.:

with wood paving type "Hi Flow" = 35 kg / m²
with wood paving type "Micro" = 25 kg / m²

The Result:

Except for very few gaps of <0.5 mm in the larger "Hi Flow" wood stones, there are no visual restrictions. The gaps that do exist are due to the "working nature" of the wood. Even when using very flexible grouts such as ROMPOX® - FLEX JOINT, it is not possible to avoid gaps 100%. This option is clearly the best visual and functional result of all variants = USE: **RECOMMENDED!**



THE BONDED CONSTRUCTION METHOD

Pavement bedding: ROMPOX® - TRASS BED
Adhesive elutriant: ROMPOX® - ADHESIVE ELUTRIANT
Fully jointed with: ROMPOX® - D1
 The proven pavement jointing mortar - colour: stone grey

Consumption of bedding products approx.:
 ROMPOX® - TRASS BED = 100 kg / m²
 ROMPOX® - ADHESIVE ELUTRIANT = 5 kg / m²

Consumption of pavement jointing mortar approx.:
 with wood paving type "Hi Flow" = 35 kg / m²
 with wood paving type "Micro" = 25 kg / m²

The Result:
 The functionality is still evident; there are only minimal gaps between the wood and the mortar of up to 1.0 mm, in particular around the larger, wooden "Hi Flow" blocks. These gaps are due to the "working nature" of the wood and cannot be avoided; however, they do partially close again depending on the

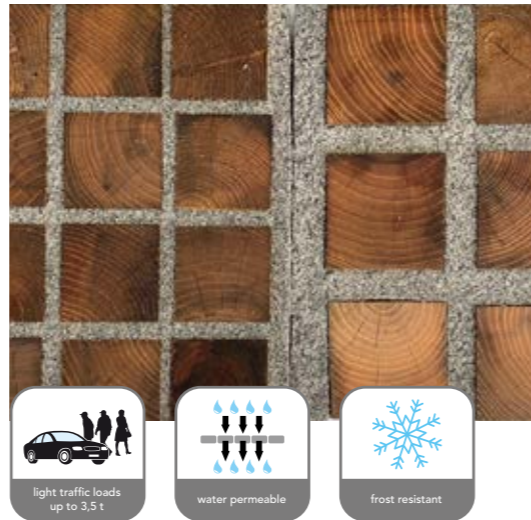
humidity. Even the worst-case scenario was tried in this experiment: the mould with the pattern system structure was sealed and completely filled with water before it was placed in the freezer. And still this box's test results were impressive.



CONCLUSION:

The ROMEX® system with the bonded construction method using the ROMEX® bedding products ROMPOX®- TRASS BED and ROMPOX® - ADHESIVE ELUTRIANT as well as the unique and tough elastic pavement jointing mortar ROMPOX® - FLEX-JOINT is the ideal complement to the wood block paving. This combination will prevail in practice over the long term even in projects with light, occasional vehicle loads.

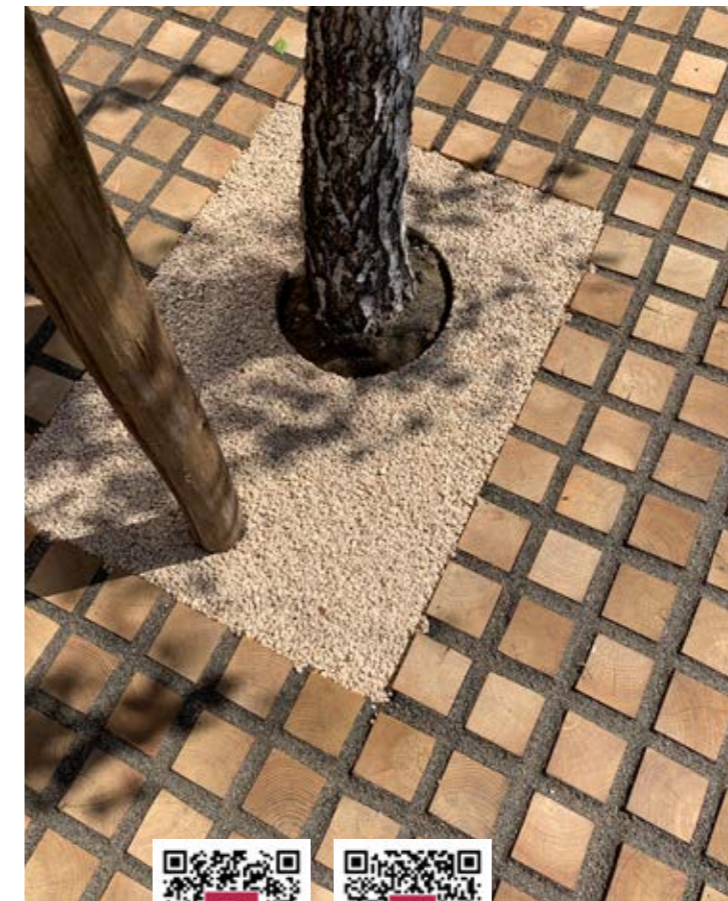
TAKE
 THE
 BEST



NATURAL AND PERMEABLE TREE SURROUNDS

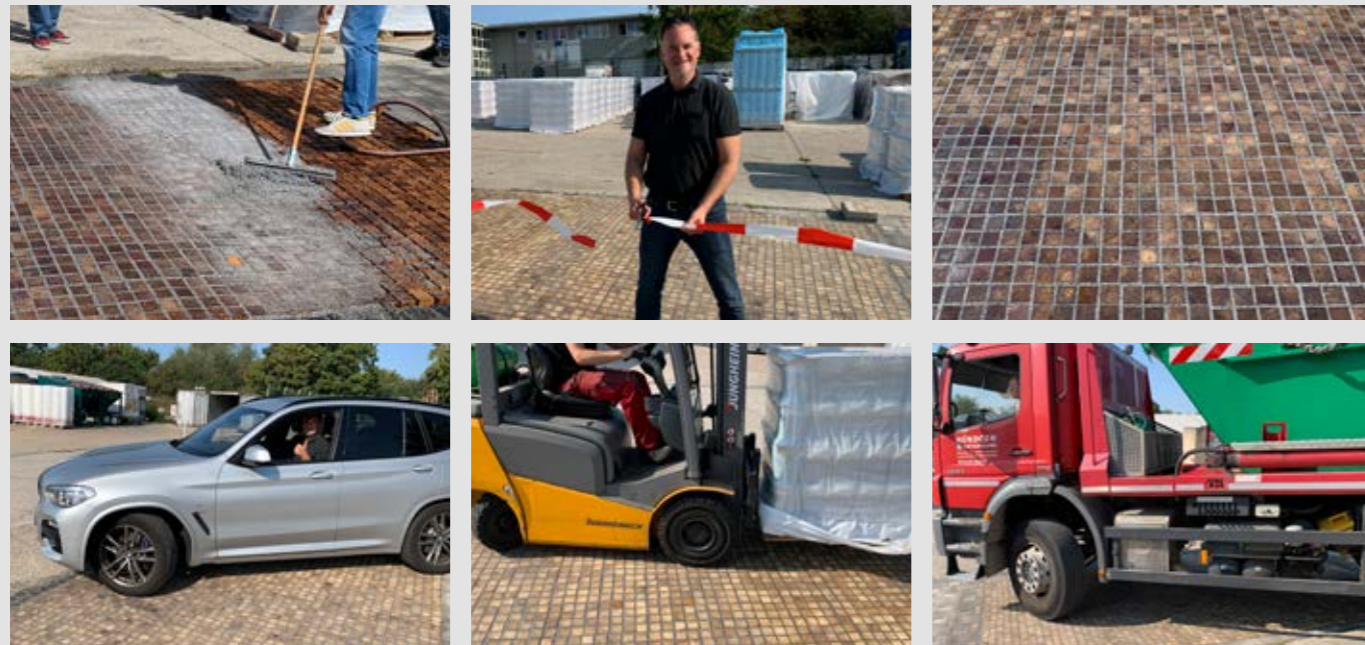
The system: PROFLEX Tree Guard

Using wood block paving type "Hi Flow" = 35 kg / m² (7 lbs / sqft.) ROMEX® pavement jointing mortar around tree trunks, we recommend the ROMEX® grit and gravel hardener from the "DEKO" series.



YouTube
 Scan and inform!

15m² large test surface in bonded construction (ROMPOX® - TRASS BED + ROMPOX® - ELUTRIANT), jointed with ROMPOX® - FLEX JOINT (colour: stone grey) was released to the market on Sept 15, 2020.



History:

The oldest DIN (European standard control) on the subject is DIN 68701/68702 from 1974, which mainly describes the use as a floor for industrial and commercial areas as well as for rooms in schools, administrative buildings and similar areas of application.

Technical Notes:

Like all types of wood, the Robinia is a natural material. Soil type and climate both influence the composition of each individual tree which means that each wood paving block is unique. As a result, slight deviations in colour, structure, density and general appearance are unique characteristics and absolutely normal. The same applies to all pavement jointing mortars since all fillers are natural products where natural colour deviations may occur. As a result of natural weathering, the wood block paving develops a silver-grey patina from UV radiation, rain, snow and oxygen. The patina is one of the special properties of the Robinia. In contrast, tropical hardwoods, due to their oily composition, can neither take on other colour nuances nor retain them.

All filling and building materials are natural products in which natural colour deviations can occur. The information printed in this brochure is based on experience and the current state of science and practice, but is non-binding and does not claim a legal assertion. All previous information in regards to these product combinations will become invalid with the publication of this brochure as do the images.
 Dated: October 2020. Subject to change.