ROMEX® COMPENDIUM

PRODUCTS, TECHNOLOGY AND SERVICE

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sales@romex.de | **romex.de**

QUALITÄT
MADE IN GERMANY

ROMEX®

ONE OF THE WORLD'S LEADING MANUFACTURERS OF JOINT SOLUTIONS FOR OVER 35 YEARS

Since our foundation in 1989, we have specialized in the development, production and sale of high-quality synthetic resin pavement jointing mortars and gravel binders as well as fast-setting repair mortars. In addition, we have developed the ROMEX® - ISATEC® displacement protection system, which is unique on the market. Our trass-cement bedding products and a cementbond jointing mortar for areas of application where it is technically necessary round off the range.

As a pioneer for innovative jointing systems, we realize demanding construction projects worldwide by providing individual advice, sample areas, site instruction and personal support right through to final acceptance. We are proud of our pioneering innovations and award-winning products, which have won awards such as the Galabau Innovation Prize, the VCI's Special Prize for SMEs and the prestigious BHB Industry Award.

We have set ourselves the goal of constantly developing our products and concepts and creating new, innovative and sustainable solutions for installers and building owners and want to continue to be your first point of contact for clean, residue-free, water-permeable and durable jointing of paving surfaces in the future.

Responsible Care®

ROMEX® Gmbh
Mühlgrabenstraße 21, 53340 Meckenheim
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romex.de

Manufacturer with own production

in Meckenheim near Bonn, Germany

ROMEX® products made in Germany

German products enjoy an excellent reputation worldwide, as they are still synonymous with quality, reliability and sustainability. Customers worldwide trust in the durability and longevity of German products. All pavement jointing mortars, gravel binders and floor coatings based on synthetic resins are manufactured in our own production facility in Meckenheim near Bonn (Germany). Our research and development department develops formulations that meet the highest quality standards - without compromise. We have also defined standards that go far beyond the generally accepted norms. We develop and produce according to the latest standards.

Research and development

Thinking ahead and pursuing new paths has made ROMEX® what it is today: a globally active family company with award-winning and award-winning products. Among other things, our patented ISATEC® anti-slip system was awarded the Innovation Medal by the Bundesverband Galabau (German Federal Association of Gardening and Landscaping (BGL) in 2014. In 2021, we received the special award for SMEs in the Responsible Care competition of Verband der Chemischen Industrie e.V. (German Chemical Industry association) for the project „Pavement jointing mortar made from environmentally friendly raw materials and recycled packaging". One year later, this pavement jointing mortar received the Industry Award of the BHB Handelsverband Heimwerken, Bauen und Garten (trade association DIY, Building and Gardening in Germany) in the „Best of Eco" category.

In order to work at a consistently high level, we are constantly developing further. All of our pavement jointing mortars and coating systems are based on our own formulas, which are developed, tested and continuously improved by our research and development department. Further developments are based on our own standards, which go far beyond current norms. All ROMEX® products are put through their paces in our laboratory and application technology department before being certified by independent bodies. For example, the stability of bonded paving surfaces was tested by the Technical University of Munich, in this case the ROMEX® system consisting of bedding mortar, bonding slurry and the pavement jointing mortar ROMPOX® - D2000.

In the series of tests, a total of 100,000 rollovers were carried out for each test surface in both rolling directions, with wheel loads increased in phases from 5 kN (heavy car) to 50 kN (heavy truck). Finally, a further test was carried out to simulate heavy, overloaded trucks (60 kN wheel load). Our ROMEX® - ISATEC® anti-displacement system was also tested and certified. More on this topic from page 37.

The MPVA (institute for material testing and experiments) investigated the improvement of the horizontal displacement resistance of paving stones through the use of special anchors in combination with viscoplastic special jointing mortar as a joint closure. A considerable increase in displacement resistance was demonstrated and documented.

Memberships

ROMEX® is a member of the Bundesverband Estrich und Belag (German Federal Screed and Flooring Association), a service provider for companies in the German screed and flooring industry. This association supports its member companies primarily in technical issues so that they can provide clients and architects with the best possible advice based on their comprehensive technical knowledge.

Since 2006, ROMEX® has been part of the German Betonverband Straße, Landschaft, Garten (SLG) (Concrete Association Street, landscape, garden), an autonomous and independent interest group of manufacturers of concrete products, with the aim of using concrete paving even more effectively for durable, functional and aesthetic paving.

ROMEX® is also a member of the German Verband der Chemischen Industrie (VCI) (Chemical Industry association) and the Deutsche Bauchemie (German Construction Chemistry Association). As a member of the VCI, we proactively participate in Responsible Care, an initiative of the chemical industry that is independent of legal requirements and aims to continuously improve our products with regard to the environment, safety and health.

SLG Betonverband Straße, Landschaft, Garten e.V.

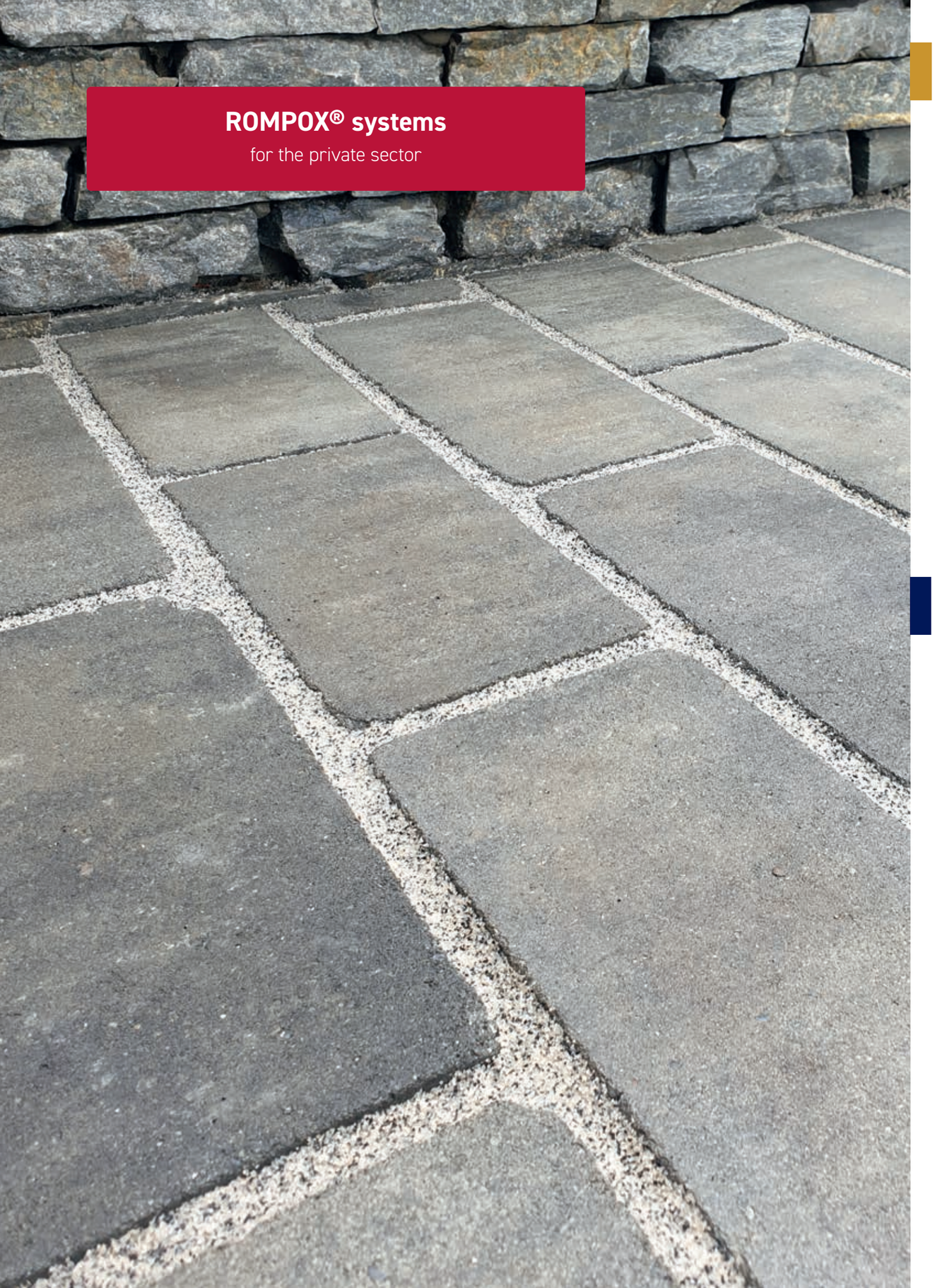
VERBAND DER CHEMISCHEN INDUSTRIE e.V. WIR GESTALTEN ZUKUNFT. VCI

DEUTSCHE BAUCHEMIE

Overview of ROMEX® products

	Product	Optimal areas of application	Joint width	Joint depth	Load		Water permeability	Container	Page
Pavement jointing mortar for private areas	**ROMPOX® - JOINTING SAND NP**	• Around the house and commercial areas, driveways • Tightly laid paving stone and slabs • Interlocking paving	> 1 mm	> 30 mm		All load classes	Highly permeable	25 kg bag	9
	ROMPOX® - D7000 JOINT STRENGTHENER	• Around the house and commercial areas • Driveways • Permanent hardening of JOINTING SAND NP	> 1 mm	> 30 mm		Light traffic load up to 3 t	Joints remain water-permeable	1 liter bottle 20 liter canister	9
	ROMPOX® - ECOFINE	• Around the house • Surfaces around pools • Tightly laid paving and slabs	> 3 mm	> 30 mm		Light traffic load up to 3.5 t	Highly permeable	12.5 kg bucket 25 kg bucket	10
	ROMPOX® - EASY	• Around the house • Terraces, garden paths • Almost all coated and sensitive stones	> 5 mm	> 30 mm		Light traffic load up to 3.5 t	Highly permeable	15 kg bucket 25 kg bucket	10
	ROMPOX® - DRAIN	• Around the house • Driveways, parking spaces • Almost all coated and sensitive stones	> 3 mm	> 30 mm		Light traffic load up to 3.5 t	Highly permeable	25 kg bucket	11
	ROMPOX® - D1	• Around the house and commercial areas • Driveways, parking spaces • Flagstones and crazy paving	> 3 mm	> 30 mm		Average traffic load up to 7.5 t	Highly permeable	27.5 kg bag 25 kg bucket	11
Pavement jointing mortar for public areas	**ROMPOX® - D2000**	• Heavily used public areas • Renovation of old paving	> 5 mm	> 30 mm		Medium to heavy traffic load up to 25 t	Permeable	27.5 kg bag	17
	ROMPOX® - TRAFFIC V2	• Extremely busy public areas • Squares, roads and traffic circles	> 8 mm	> 30 mm		Highest traffic load up to 40 t	Permeable	28 kg bag	18
	ROMPOX® - W1000	• Heavily used public areas	> 8 mm	> 30 mm		Highest traffic load up to 40 t	Permeable	28 kg bag	18
	ROMPOX® - 301 CEM-PF	• Surfaces in rail areas • In hydraulic engineering • Can be used for old and new plaster	> 3 mm	> 40 mm		Highest traffic load up to 40 t	Impermeable	25 kg bag	25
	ISATEC® - FLEX	• Heavily used public areas • Concrete blocks and slabs	> 5 mm	> 30 mm		Highest traffic load up to 40 t in combination with ISATEC® - STOP up to Bk3.2	Permeable	25 kg bucket	37
Repair mortar	**ROMPOX® - D3000**	• Public areas • Renovation of defective cement surfaces • Renovation of old paving	> 3 mm	> 10 mm joint crack depth		Medium to heavy traffic load up to 25 t	Highly permeable	27.5 kg bag	17
	ROMPOX® - D4000	• Renovation, repair in the public sector	Surface depth > 10 mm			Highest traffic load up to 40 t	Permeable	17.5 kg bucket	19
	ROMPOX® - D4000 HR	• Renovation, repair in the public sector	Surface depth > 10 mm			Highest traffic load up to 40 t	Permeable	17.5 kg bucket	19
Cement/bedding products	**ROMPOX® - 302 CEM-TB (TRASS BEDDING)**	• Around the house and public areas	> 3 cm layer thickness			Highest traffic load up to 40 t	Highly permeable	25 kg bag	25
	ROMPOX® - 303 CEM-TC (TRASS-BEDDING-COMPOUND)	• Around the house and public areas	> 3 cm layer thickness			Highest traffic load up to 40 t	Highly permeable	25 kg bag	26
	ROMPOX® - 304 CEM-HS (ADHESION ELUTRIANT)	• Around the house and public areas				Highest traffic load up to 40 t	Impermeable	25 kg bag	26
Grit/gravel binder	**ROMPOX® - 201 DEKO UV**	• Private driveways, parking spaces • Publicly used footpaths • All grit and gravel, especially for light-colored rocks	Surface depth > 20 mm			Light traffic load up to 3 t	Very highly permeable	1.25 kg bottle pack 30 kg container	31
	ROMPOX® - 202 DEKO EP (PROFI-DEKO)	• Private driveways, parking spaces • Publicly used footpaths • For dark grit and gravel	Surface depth > 20 mm			Light traffic load up to 3 t	Very highly permeable	3 kg bottle pack 30 kg container	31

ROMEX®-SYSTEM-GUARANTEE Read more from page 27



ROMPOX® systems

for the private sector

ROMPOX® - JOINTING SAND NP

The solid, self-repairing jointing sand

Modified 1-component system

ROMPOX® - JOINTING SAND NP is a water-permeable, weed-inhibiting jointing sand based on predominantly natural raw materials. It meets all the requirements of the scheme of the AgBB (Committee for the health evaluation of construction products), tested by the eco-institute Cologne. The jointing sand is quick and easy to use and is ideal for narrow joints, especially for interlocking paving stones. On contact with water, the jointing sand becomes plastic so that any settlement cracks that occur can be smoothed and removed with a jointing iron. ROMPOX® - JOINTING SAND NP can be stabilized with ROMPOX® - D7000 JOINT STRENGTHENER for a permanent jointing at the level of a jointing mortar.

Properties

- Easy to use
- Self-repairing
- Low dust
- Reduces weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- Tested according to AgBB (VOC)
- Mixed ready to use

Areas of application

- Joint widths from 1 mm | 1/16" (recommended up to 5 mm | 1/4")
- Around the house and commercial areas
- Areas with traffic load
- Tightly laid paving and slabs
- Interlocking paving
- Repair of joint cracks
- Almost all coated and sensitive stones
- Unbonded construction method

Technical data

Solid mortar bulk density:	1.55 kg/dm³
Water permeability:	3.2×10^{-3} m/s approx. 19.2 l/min/m²
Storage life:	24 months
Storage:	Dry, in the original sealed bag

ROMPOX® - D7000 JOINT STRENGTHENER

Liquid polymer stabilizer for sand joints and path coverings

1-component polymer system

ROMPOX® - D7000 JOINT STRENGTHENER is a special liquid for the subsequent stabilization of jointing sands and road surfaces with sufficient fine particles to protect against washout, erosion, erosion in slopes, weed growth and to bind dust. ROMPOX® - D7000 JOINT STRENGTHENER is characterized by its high strength and toughness, which is a considerable advantage especially in unbonded constructions. ROMPOX® - JOINTING SAND NP can be stabilized with ROMPOX® - D7000 JOINT STRENGTHENER for a permanent jointing at the level of a jointing mortar.

Properties

- Easy to use
- Reduces weed growth
- Joints remain permeable to water
- Frost and de-icing salt resistant
- Mixed ready to use
- Prevents gravel migration on flat roofs
- Reduces surface abrasion
- Reduces dust formation
- Reduces erosion on sloped areas during heavy rainfall
- Also for do-it-yourselfers

Areas of application

- Joint widths from 1 mm | 1/16"
- Around the house and commercial areas
- Permanent hardening of JOINTING SAND NP
- Unbonded construction method
- Areas with traffic load
- Repair of joint cracks
- Flat roofs
- Drip edges
- Unbonded road surfaces

Technical data

Water permeability:	Depending on joint material
Storage life:	Min. 12 months
Storage:	Frost-free, protect container from direct sunlight

JOINTING SAND NP **PLUS** D7000 JOINT STRENGTHENER

The only durable solution for joint widths of less than 3 mm

Surfaces with joint widths of less than 3 mm cannot be jointed with pavement jointing mortar, or only with great effort. Joint sand is therefore the only efficient way to fill narrow joints. The solution for a permanently strong joint at jointing mortar level is the subsequent finishing of the surface with our special products. To permanently stabilize ROMPOX® - JOINTING SAND NP, we recommend the subsequent use of ROMPOX® - D7000 JOINT STRENGTHENER.

ROMPOX® - ECOFINE

The strong, sustainable pavement jointing mortar

One for everything and everything with one!

1-component polymer resin system

ROMPOX® - ECOFINE is a ready-to-use 1-component pavement jointing mortar that hardens on contact with air or oxygen. Thanks to its outstanding properties and strength, ROMPOX® - ECOFINE is suitable for almost every area of application around the house, but especially for driveways, ceramic tiles and use around pools. The pavement jointing mortar consists of 98% natural, recycled or renewable raw materials. The bio-based binder contains mainly natural oils such as rapeseed oil. ROMPOX® - ECOFINE has received several awards for this.

Properties

- No resin film
- High compressive strength
- Chlorine and salt water resistant
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Can be applied in drizzle
- Firm to walk on
- Mixed ready to use

Areas of application

- Joint widths from 3 mm | 1/8"
- Around the house
- Areas with traffic loads up to 3.5 t
- Tightly laid paving and slabs
- 2 cm | ¾" ceramic tiles in bonded construction method
- Surfaces around pools
- Almost all coated and sensitive stones
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	20.9 N/mm²
Bending tensile strength:	9.8 N/mm²
Solid mortar bulk density:	1.64 kg/dm³
Water permeability:	1.4 × 10^{-3} m/s approx. 8.4 l/min/m²
Storage life:	24 months
Storage:	Protect from direct sunlight, do not stack pallets, frost-resistant

ROMPOX® - EASY

Easiest to use pavement jointing mortar

1-component system

ROMPOX® - EASY is a ready-to-use 1-component pavement jointing mortar that hardens on contact with air or oxygen. Thanks to its simple application, ROMPOX® - EASY is also suitable for do-it-yourselfers and can be easily applied to all surfaces with water-permeable bedding around the house. ROMPOX® - EASY has been the solid solution for jointing paving stones and natural stone coverings for decades.

Properties

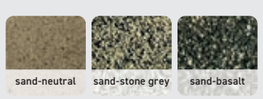
- Easy to use
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Can be applied in drizzle
- Firm to walk on
- Mixed ready to use
- Also for do-it-yourselfers

Areas of application

- Joint widths from 5 mm | 1/4"
- Joint widths from 3 mm | 1/8" possible with increased effort
- Around the house
- Areas with traffic loads up to 3.5 t
- Almost all coated and sensitive stones
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	7.1 N/mm²
Bending tensile strength:	3.4 N/mm²
Solid mortar bulk density:	1.54 kg/dm³
Water permeability:	7.5 × 10^{-6} m/s approx. 2.3 l/min/m²
Storage life:	Min. 24 months
Storage:	Protect from direct sunlight, do not stack pallets, frost-resistant



Not only one of the best mortars, but also unique in terms of sustainability

ROMPOX® - ECOFINE consists of 98 % natural, recycled or renewable raw materials and is cobalt-free. The bio-based binder contains mainly natural oils such as rapeseed oil. Basalt, one of the main components, has been replaced by a by-product of the coal industry. The bucket consists of 100% recycled plastics (PCR). The energy required for the production of ROMPOX® - ECOFINE is generated using solar power. This is why this product has won several prizes and awards.

ROMPOX® - D1

The proven pavement jointing mortar

Water-emulsifiable 2-component epoxy resin system

ROMPOX® - D1 is a high-quality 2-component pavement jointing mortar for many areas of application in both private and commercial areas. Thanks to its good flowability and high strength, ROMPOX® - D1 is particularly suitable for jointing flagstones and crazy paving, driveways and access roads with a load of up to 7.5 t and for renovating old paved surfaces. Jointing with ROMPOX® - D1 intensifies the natural color of the stone.

Properties

- High flowability
- Self-compacting
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Joint widths from 3 mm | 1/8"
- Around the house and commercial areas
- Areas with traffic loads up to 7.5 t
- Flagstones and crazy paving
- Concrete blocks and slabs
- Tightly laid paving and slabs
- 2 cm | ¾" ceramic tiles in bonded construction method
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	25.8 N/mm²
Bending tensile strength:	12 N/mm²
Static modulus of elasticity:	8 000 N/mm²
Solid mortar bulk density:	1.68 kg/dm³
Water permeability:	7.5 × 10^{-4} m/s approx. 2.3 l/min/m²
Storage life:	24 months
Storage:	Protect from direct sunlight, frost-free

ROMPOX® - DRAIN

The secure pavement jointing mortar

Water-emulsifiable 2-component epoxy resin system

ROMPOX® - DRAIN is a high-quality 2-component pavement jointing mortar for jointing paving and slab coverings made of natural stone, concrete block and clinker. Thanks to modern additives, ROMPOX® - DRAIN can be washed into the joints, making the jointing mortar suitable for narrow joints and easy to use at low temperatures and even in drizzle. When applied correctly, ROMPOX® - DRAIN leaves virtually no synthetic resin film.

Properties

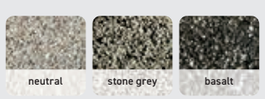
- Almost resin film free
- Can be washed in
- Self-compacting
- High flowability
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Can be applied in drizzle
- Firm to walk on

Areas of application

- Joint widths from 3 mm | 1/8"
- Around the house
- Areas with traffic loads up to 3.5 t
- Tightly laid paving and slabs
- Paving slabs up to 40 × 40 cm | 15 ¾" × 15 ¾"
- Almost all coated and sensitive stones
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	25 N/mm²
Bending tensile strength:	10 N/mm²
Solid mortar bulk density:	1.52 kg/dm³
Water permeability:	1.5 × 10^{-3} m/s approx. 4.5 l/min/m²
Storage life:	24 months
Storage:	Protect from direct sunlight, frost-free



The synthetic resin film protects the surface and gives the stones an intense color

After each pointing with 2-component epoxy resin paving mortar, a thin synthetic resin film first forms on the stone surface. This film leads to a natural intensification of the stone color and at the same time acts as a high-quality surface sealant that protects the stone from soiling. Depending on the product and stone used, the color intensification is more (ROMPOX® - D1) or less (ROMPOX® - DRAIN) intense. Over time, the color deepening disappears due to stress and weathering. However, it can be refreshed at any time with a color intensifier. Please contact us.

Assembly recommendations

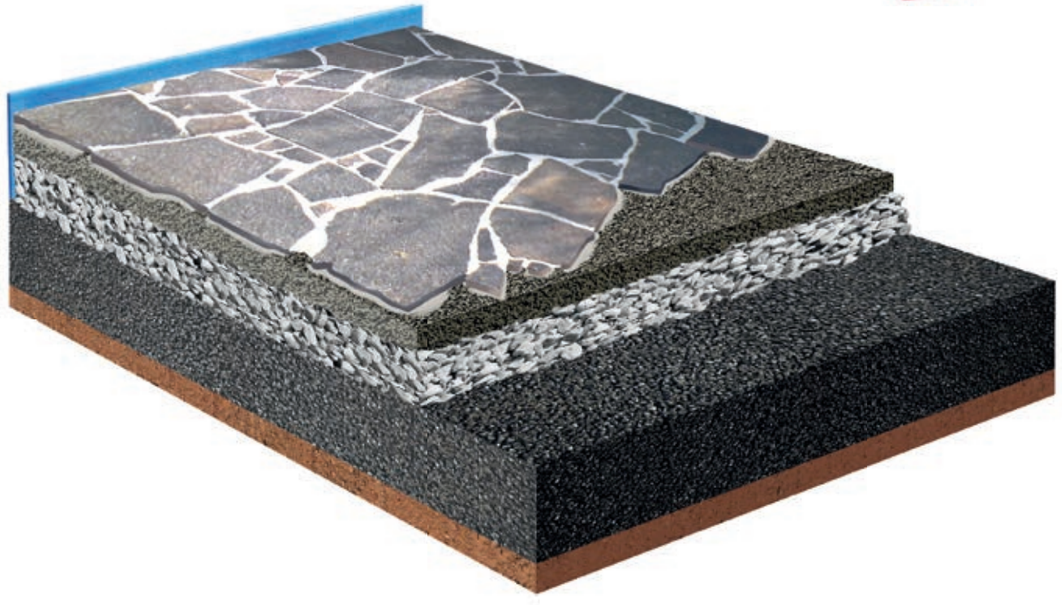
for permanently stable surfaces

Polygonal slabs

Polygonal slabs have been very popular for decades. Their natural, rustic shape creates an inviting, Mediterranean flair in the garden. However, the special features of the irregular shapes and broken edges require particular care when laying. Due to the different slab thicknesses of between 2-6 cm and the mostly conical shape, a bonded installation with the right system is a basic requirement for a permanently stable covering. For long-term outdoor use, polygonal slabs should be laid in a bonded, water-permeable bedding and jointed with a pavement jointing mortar with good edge adhesion.

We recommend the following as the optimum system

- ROMPOX® - 302 CEM-TB (TRASS-BEDDING),
  ROMPOX® - 303 CEM-TC (TRASS-BEDDING-COMPOUND) with
  ROMPOX® - 304 CEM-HS (ADHESION ELUTRIANT)
- ROMPOX® - DRAIN
- ROMPOX® - D1

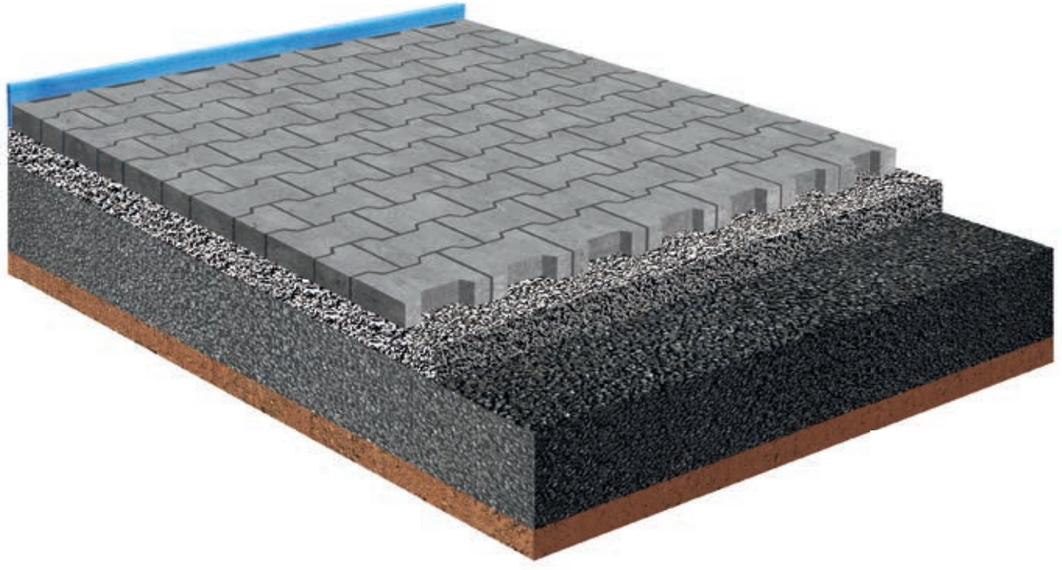


Interlocking paving stones

Interlocking and concrete block paving is almost always laid unbond. Not only in driveways, but also in parking lots at the house, on garden paths and terraces. Not least because of their robustness, durability and timeless design. Narrow joints in this paving cannot be created with conventional pavement jointing mortar, or only with great effort. As a result, weed growth cannot always be prevented. Jointing sands are the only way to fill the narrow joints. The solution for a durable, stable jointing at the level of a joint mortar is the subsequent finishing of the surface with our special product ROMPOX® - D7000 JOINT STRENGTHENER. The combination of these products combines their respective advantages. The weed-inhibiting jointing sand is suitable for joints with a width of at least 1 mm and fills them completely. ROMPOX® - D7000 JOINT STRENGTHENER provides the necessary and lasting stability.

We recommend the following as the optimum system

- ROMPOX® - JOINTING SAND NP combined with
  ROMPOX® - D7000 JOINT STRENGTHENER



Assembly recommendations

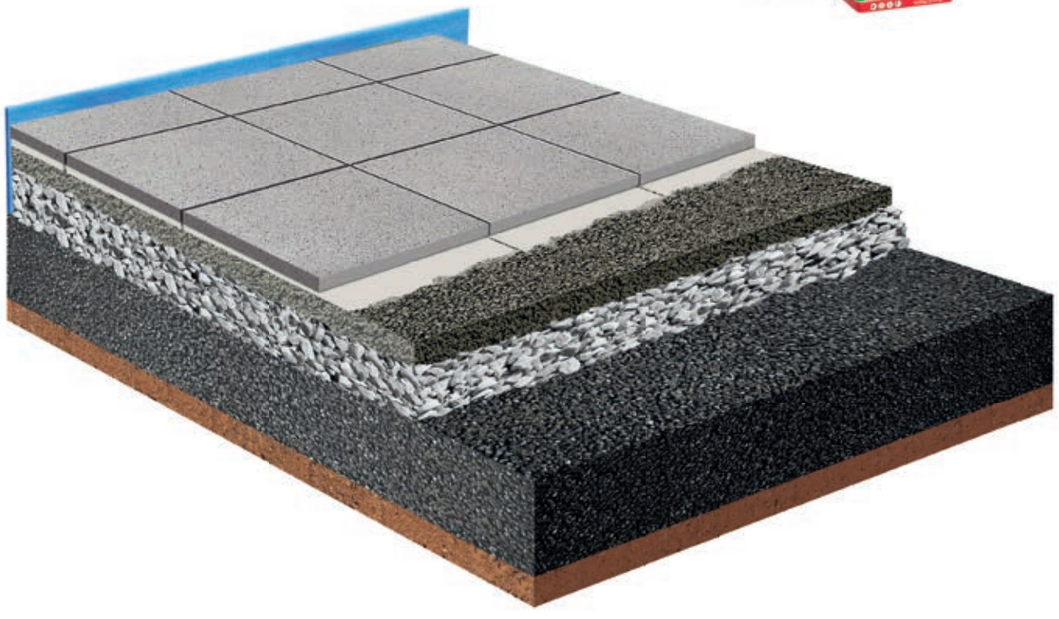
for permanently stable surfaces

Coated stone coverings

Many concrete block surfaces and an increasing number of natural stone surfaces are coated at the factory. These coatings are intended to protect the stone surface from soiling and color fading and to prevent algae/moss formation. In rare cases, some coatings can react with synthetic resins and cause stains or sandy surfaces. Tests on an inconspicuous area are therefore always advisable. When selecting the pavement jointing mortar, make sure that it does not leave a synthetic resin film or is compatible with the covering.

We recommend the following as the optimum system

- ROMPOX® - 302 CEM-TB (TRASS-BEDDING),
  ROMPOX® - 303 CEM-TC (TRASS-BEDDING-COMPOUND) with
  ROMPOX® - 304 CEM-HS (ADHESION ELUTRIANT)
- ROMPOX® - DRAIN
- ROMPOX® - ECOFINE
- ROMPOX® - JOINTING SAND NP (in the unbonded construction method)

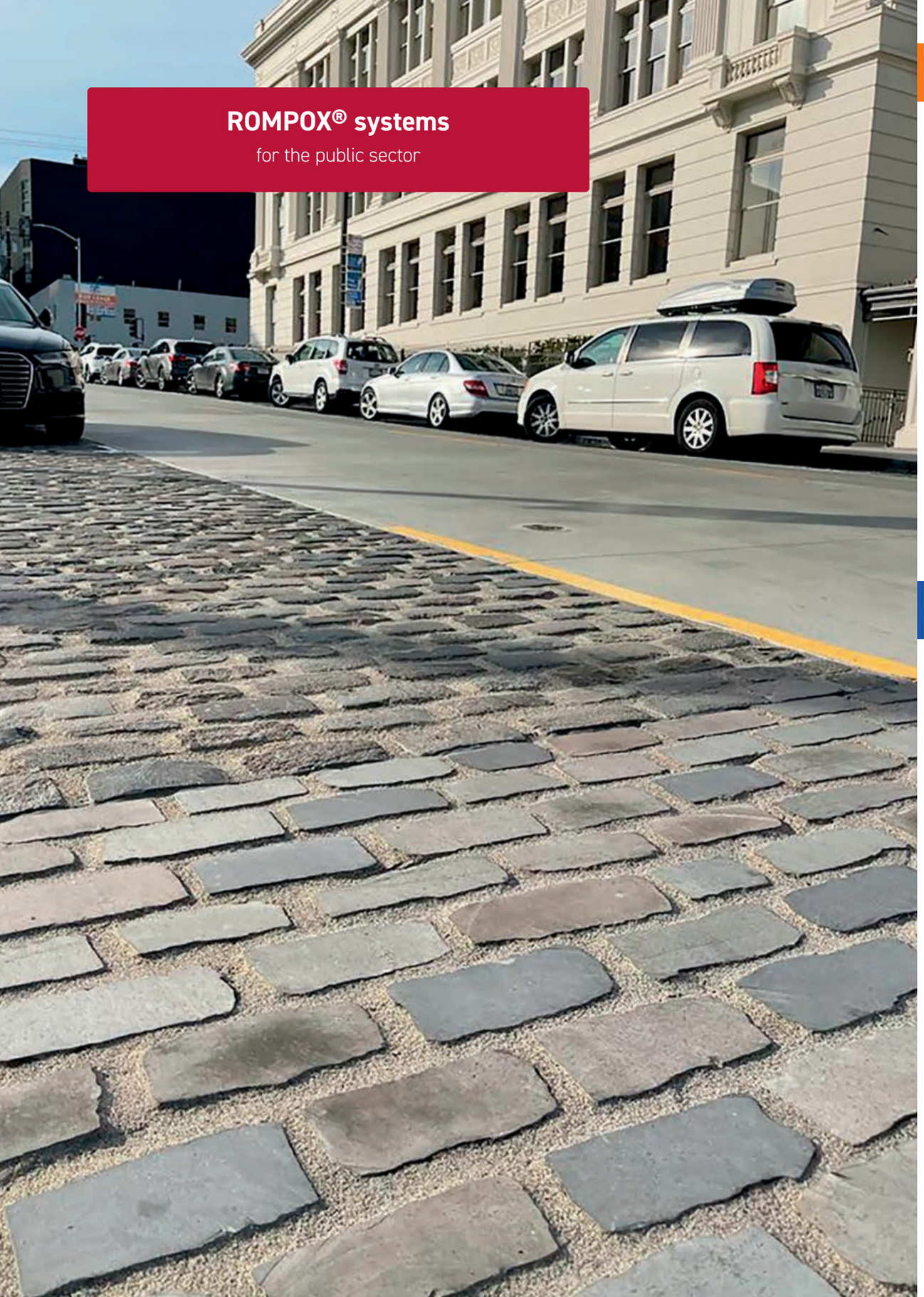


Ceramic tiles

Ceramic slabs, tiles with a natural stone or wood look and high-quality natural stone coverings are all the rage. This is because, unlike concrete and natural stone, ceramic is color-fast, more scratch-resistant and less sensitive to dirt. A professional, bonded installation using the right system is the basic requirement for a long-lasting covering that can withstand all weather conditions without any problems. As modern ceramic tiles are often only 2 cm thick, they must be laid in a bonded, water-permeable bedding for longterm outdoor use.

We recommend the following as the optimum system

- ROMPOX® - 302 CEM-TB (TRASS-BEDDING),
  ROMPOX® - 303 CEM-TC (TRASS-BEDDING-COMPOUND) with
  ROMPOX® - 304 CEM-HS (ADHESION ELUTRIANT)
- ROMPOX® - DRAIN
- ROMPOX® - ECOFINE



ROMPOX® systems

for the public sector

ROMPOX® - D2000

The modern pavement jointing mortar

Water-emulsifiable 2-component epoxy resin system

ROMPOX® - D2000 is a pavement jointing mortar for jointing heavily used surfaces in public areas. It is suitable for the new jointing of squares, roads and paths as well as for the renovation of existing paved surfaces and as a gutter mortar in accordance with german regulations (ATV DIN 18318:2019), from a joint width of 5 mm. Particularly noteworthy is the fast reopening of traffic after installation. ROMPOX® - D2000 has very good application properties and meets all requirements for use categories N1-N3 in accordance with the german regulations ZTV-Wegebau as well as DIN 18318:2019 and RStO.

Properties

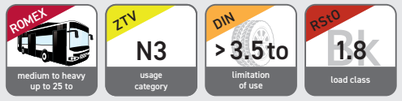
- Resistant to street cleaning vehicles
- Fast reopening of traffic
- High flowability
- Self-compacting
- No weed growth
- Water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Joint widths from 5 mm | 1/4"
- Public areas
- Areas with traffic loads up to 25 t
- Squares, roads and paths
- Paving gutters
- Renovation of old paving
- Concrete blocks and slabs
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	51.9 N/mm²
Bending tensile strength:	15.4 N/mm²
Static modulus of elasticity:	11 200 N/mm²
Solid mortar bulk density:	1.76 kg/dm³
Water permeability:	9.1 × 10⁻⁶ m/s approx. 0.03 l/min/m²
Storage life:	24 months
Storage:	Resin/hardener component: frost-free, filler component: dry



ROMPOX® - D3000

The pavement jointing slurry for renovation

Water-emulsifiable 2-component epoxy resin system

ROMPOX® - D3000 is a pavement jointing slurry that can be used to repair old, damaged cement joints quickly, easily and cost-effectively. Thanks to its very good flowability, fine grain size and high flank adhesion, the jointing slurry can bond with the old, intact joints so that only joints in need of repair have to be removed. Particularly noteworthy is the rapid opening to traffic after installation. ROMPOX® - D3000 has very good application properties and meets all requirements for use categories N1-N3 in accordance with the german regulations ZTV-Wegebau as well as DIN 18318:2019 and RStO.

Properties

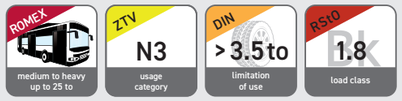
- Resistant to street cleaning vehicles
- High flowability
- Self-compacting
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Joint crack widths from 3 mm | 1/8"
- Joint crack depths from 10 mm | 3/8"
- Public areas
- Areas with traffic loads up to 25 t
- Renovation of defective cement surfaces
- Renovation of old paving
- Concrete blocks and slabs
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	34.5 N/mm²
Bending tensile strength:	12.2 N/mm²
Static modulus of elasticity:	7 800 N/mm²
Solid mortar bulk density:	1.68 kg/dm³
Water permeability:	7.5 × 10⁻⁴ m/s approx. 2.3 l/min/m²
Storage life:	24 months
Storage:	Resin/hardener component: frost-free, filler component: dry



Correct renovation instead of cost-intensive removal and re-laying

Until now, the options for renovating old paved surfaces were limited. Depending on the use and extent of the destruction of the paved surfaces, the only option left was the cost-intensive rebuilding of the surface. However, old joints can be renovated without removing and relaying the paving stones if the paving surface is still easy to walk and drive on. ROMPOX® - D3000 can be used to rework and repair old cement joints, thereby restoring the joint and stabilizing the paving. In addition, narrow joints and even cracks in paving stones can be repaired.

ROMPOX® - TRAFFIC V2

The hardest pavement jointing mortar

2-component epoxy resin system
ROMPOX® - TRAFFIC V2 is a high-strength 2-component pavement jointing mortar for jointing extremely heavily used surfaces in public areas. It is suitable for repointing roads, squares and traffic circles, for example, as well as for paving gutters in accordance with german regulations (ATV DIN 18318:2019), from a joint width of 8 mm. The high compressive strength is particularly noteworthy. ROMPOX® - TRAFFIC V2 meets all requirements for use categories N1-N3 in accordance with the german regulations ZTV-Wegebau as well as DIN 18318:2019 and RStO.

Properties

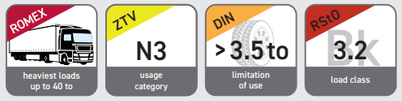
- Resistant to street cleaning vehicles
- High compressive strength
- High strength
- No weed growth
- Water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Joint widths from 8 mm | 3/8"
- Public areas
- Areas with traffic loads up to 40 t
- Squares, roads and roundabouts
- Paving gutters
- Concrete blocks and slabs
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	76.8 N/mm²
Bending tensile strength:	22.2 N/mm²
Static modulus of elasticity:	12 200 N/mm²
Solid mortar bulk density:	1.83 kg/dm³
Water permeability:	4.78 × 10^{-6} m/s approx. 0.015 l/min/m²
Storage life:	24 months
Storage:	Resin/hardener component: frost-free, filler component: dry



ROMPOX® - W1000

The pavement jointing mortar for winter use

2-component epoxy resin system
ROMPOX® - W1000 is a 2-component pavement jointing mortar specially designed for winter for jointing surfaces in public areas in permafrost conditions (day and night temperatures below 0 °C). It is suitable for resurfacing roads, squares and roundabouts, for example, as well as for paving gutters in accordance with german regulations (ATV DIN 18318:2019), from a joint width of 8 mm. Particularly noteworthy is the fact that the joint mortar cures easily at temperatures as low as -5 °C. ROMPOX® - W1000 meets all requirements for use categories N1-N3 in accordance with the german regulations ZTV-Wegebau as well as DIN 18318:2019 and RStO. **The product is only available in winter and on request.**

Properties

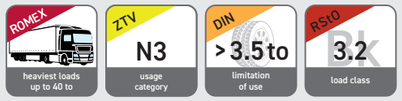
- Can be applied down to -5 °C
- Resistant to street cleaning vehicles
- No weed growth
- Water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- For joint widths from 8 mm | 3/8"
- Public areas
- Areas with traffic loads up to 25 t
- Squares, roads and roundabouts
- Paving gutters
- Concrete blocks and slabs
- Paved areas and natural stone surfaces

Technical data

Compressive strength:	33.4 N/mm²
Bending tensile strength:	13.9 N/mm²
Solid mortar bulk density:	1.61 kg/dm³
Water permeability:	7.5 × 10^{-4} m/s approx. 2.3 l/min/m²
Storage life:	24 months
Storage:	Resin/hardener component: frost-free, filler component: dry



With ROMPOX® - W1000, wintertime becomes jointing time

With ROMPOX® - W1000, we offer a synthetic resin pavement jointing mortar that can be used in permafrost (day and night temperatures below 0 °C) for completing construction sites in the cold season or in the event of unexpected drops in temperature. This helps to ensure that projects can be completed on time when winter sets in. This has several advantages: No loss of work or payment due to poor weather conditions, a higher work-load in winter and therefore an equalization of the schedule.

ROMPOX® - D4000

The simple repair mortar

2-component epoxy resin system
ROMPOX® - D4000 is a high-strength 2-component repair mortar and the modern solution for road maintenance and renovation in road construction. D4000 is used for force-fit crack sealing and for repairing asphalt surfaces and break-out points on concrete elements. Thanks to its good reactivity, surfaces can be reopened within a short time. The repair mortar ROMPOX® - D4000 can be used all year round, even at low temperatures from 5° C.

Properties

- High strength
- Fast reopening of traffic
- Resistant to street cleaning vehicles
- No weed growth
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Surface depths from 10 mm
- Commercial and public areas
- Areas with traffic loads up to 40 t
- Repair of edges and break-outs
- Repair of blowholes and defects
- Crack sealing in floor coatings
- Road damage and potholes
- Spalling of kerbstones

Technical data

Compressive strength:	47.3 N/mm²
Bending tensile strength:	18.3 N/mm²
Static modulus of elasticity:	8 700 N/mm²
Solid mortar bulk density:	1.72 kg/dm³
Storage life:	24 months
Storage:	Frost-free, dry

ROMPOX® - D4000 HR

The quick repair mortar

Highly reactive 2-component epoxy resin system
ROMPOX® - D4000 HR is a high-strength 2-component repair mortar and the modern solution for road maintenance and renovation in road construction. D4000 HR is used for force-fit crack sealing and for repairing asphalt surfaces and break-outs on concrete elements. The highly reactive repair mortar can even be used in winter at temperatures as low as -10 °C. Thanks to its high reactivity, surfaces can be reopened within a very short time.

Properties

- Highly reactive
- Can be applied down to -10 °C
- Very fast reopening of traffic
- High strength
- Resistant to street cleaning vehicles
- No weed growth
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

- Surface depths from 10 mm
- Commercial and public areas
- Areas with traffic loads up to 40 t
- Repair of edges and break-outs
- Repair of blowholes and defects
- Crack sealing in floor coatings
- Road damage and potholes
- Spalling of kerbstones

Technical data

Compressive strength:	51.2 N/m²
Bending tensile strength:	19.4 N/mm²
Static modulus of elasticity:	8 900 N/mm²
Solid mortar bulk density:	1.73 kg/dm³
Storage life:	24 months
Storage:	Frost-free, dry

High-performance repair mortar for the highest demands

Our reactive resin-based mortar systems are the ideal solution for all types of refurbishment projects. Developed for high-strength and fast-curing repairs, the systems achieve impressive strength. For you, this means: versatile application options, fast traffic approval and long-lasting repairs. Even at extreme sub-zero temperatures and under the toughest conditions, our repair mortars remain reliably strong. Whether road damage, industrial floors, edge spalling or defects - our repair mortars can be used to overcome all challenges, as well as to precisely level out differences in level and height, even in difficult areas such as manholes and manhole covers.

Hauenstein, Marktplatz, ROMPOX® - D2000

New construction and renovation

System solutions for the public sector

Pedestrian zones, market squares and streets

Increasing traffic loads, delivery traffic, weekly and Christmas markets, extreme weather conditions and the associated need for pavement cleaning by street cleaning vehicles promote joint shrinkage and consequently the erosion of the entire paved surface. With every frost period, hydraulically bonded joints with weak points are further damaged, they crack and break out. In the long term, the result is an empty joint, displaced paving and a ruined surface appearance. The inability to walk on the surface and the associated risk of accidents for residents and tourists are a major problem. Thanks to our synthetic resin pavement jointing mortar, frost damage is a thing of the past, as are unsightly cement smears. Our pavement jointing mortar systems ensure that representative surfaces in particular look visually appealing. Another advantage of the synthetic resin systems is that the surface can be released quickly after jointing is complete. In contrast to most hydraulically bound pavement jointing mortars, which can only be released for traffic after 28 days, our pavement jointing mortar systems can be released after just 24 hours. Even the heaviest loads caused by bus and truck traffic are no problem for our jointing mortars if the superstructure is suitable. Depending on the system, our pavement jointing mortars have compressive strength values of well over 50 N/mm² and can withstand such loads.

Cologne, Salzgasse, ROMPOX® - D2000

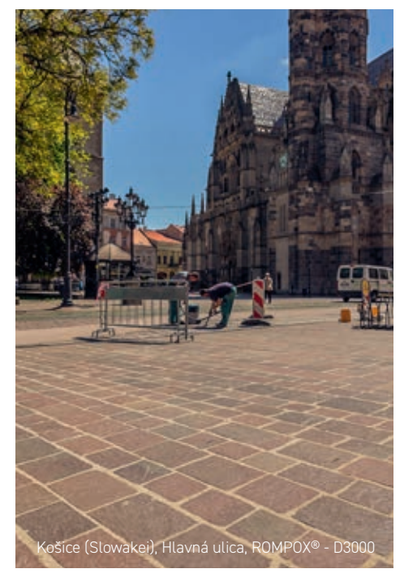
Kerbs, gutters and traffic islands

We offer various product solutions for the standard-compliant installation of kerbstones, paving gutters and traffic islands. According to german regulations (ATV DIN 18318:2019), joints in gutters must be between 10-15 mm wide, the paving must be laid „fresh in fresh“ and jointed with bonded pavement jointing mortar. Our jointing systems with high compressive strength and very good application properties are suitable for paving gutters made of natural stone or concrete block paving, which direct the surface water into the drainage system provided for this purpose. Traffic islands should be clean and low-maintenance. Our systems are extremely durable and resistant to weathering, traffic loads and mechanical stress from street cleaning vehicles. The joints prevent weed growth and are easy to clean, which reduces maintenance costs. Existing areas can be renovated without cost-intensive removal of the paving.

Renovation of damaged cement joints

The options for renovating old paved surfaces were often limited. Depending on the use and extent of the destruction of the paving surfaces, the only remaining option was the cost-intensive rebuilding of the surface. Old joints can be refurbished without the need to take up and lay new paving stones if the paving surface is still easy to walk and drive on, the surface level is acceptable to the client and only the refurbishment of the joint and stabilization of the paving are required. Our pavement jointing slurry can be used to rework and repair old cement joints. The narrowest joints and cracks in paving surfaces can also be repaired. The joints must be at least 3 mm wide and at least 10 mm deep. In the long term, local authorities incur considerable follow-up costs for the maintenance and repair of paved surfaces. Especially with an annual budget of € 0.50 - 1.00 per square meter, municipalities are faced with unsolvable tasks. Another not insignificant problem is municipal liability in the event of accidents caused by unjointed and unsecured paving. Added to this are the high levels of stress caused by delivery traffic and street cleaning vehicles on areas that were never intended for such use when they were planned. Once weak spots have formed, action must be taken quickly, as shear and shear forces contribute to the destruction of adjacent, still intact paving due to the „domino effect“. Defective joints must be repaired immediately.

Ljubljana (Slowenien), ROMPOX® - D2000



Košice (Slowakei), Hlavná ulica, ROMPOX® - D3000

Borkum, Wandelbahn, ROMPOX® - D2000

Coastal and flood areas

Sustainable protection for heavily used surfaces

Coastal towns, flood and inundation areas

Coastal locations, high tide areas and flooded areas with heavy seas place special demands on the execution of the work and the joint material. In addition, the subsoil, especially on islands (e.g. Borkum), cannot always provide the required 45 MPa due to natural conditions and provides a significantly lower modulus of elasticity than the prescribed standard. Our salt water and frostresistant jointing systems are fully capable of bearing standing salt and fresh water and protecting the joints from washout. High compressive strength and strong flank adhesion provide the necessary, permanent hold of the joints and withstand extreme loads, such as storm surges. Our mortars are known for their durability and resistance to extreme weather conditions. They can also withstand moisture, UV radiation, salt water and chemical influences that are prevalent in coastal regions.

Hamburg, Fischmarkt, ISATEC® - FLEX

Project evaluation of the Wandelbahn Borkum 7 years after completion of the work

Borkum, Wandelbahn, ROMPOX® - D2000

Hamburg, ROMPOX® - D2000

Highly reactive repair mortar

Versatile areas of application

Pothole and kerb repairs, stair repairs

The road network in Germany is already overloaded today, and no improvement is expected in the future. As most road surfaces in Germany are made of asphalt, the fact that the asphalt loses its elasticity and grip over time is a decisive factor in addition to the permanently high traffic load. The material fatigues and cracks appear, which develop into potholes due to erosion and ice formation, among other things.

These potholes and chipped kerbs are both a nuisance and a source of danger. Local authorities are therefore very keen to rectify these defects as quickly and permanently as possible. Preferably in winter, when there is time for such repair work. However, most materials reach their limits in sub-zero temperatures. What's more, conventional products such as cold asphalt crumble after a while, meaning that the repair does not last long.

We have the solution for you! Our highly reactive synthetic resin mortar systems are unique repair mortars that can even be used at temperatures as low as -10 °C, depending on the product. This means that construction yards and road maintenance companies can use these products all year round. Due to the material properties and consistency, our repair mortar systems can also be used for repairing edges and grit (e.g. kerbs, steps and ramps). The systems are therefore used both outdoors and in warehouses and industrial halls.

Status report on pothole renovation in the town of Zülpich

ROMPOX® cement products

Security in the system

ROMPOX® - 301 CEM-PF

NEW!

Modified cement jointing mortar for all load classes

Modified cement system

ROMPOX® - 301 CEM-PF is a hydraulically hardening and fast-setting cementitious jointing mortar for the jointing of paving and slab coverings made of natural and concrete stones as well as clinker, both indoors and outdoors. ROMPOX® - 301 CEM-PF is impermeable to water, resistant to frost and de-icing salt and suitable for surfaces subject to the heaviest traffic loads, such as rail areas, lanes and in hydraulic engineering as well as for special construction methods. Thanks to organic and inorganic additives, the cement jointing mortar has very good application properties and fulfills all requirements for use categories N1-N3 in accordance with german regulations ZTV-Wegbau and guidelines of the German Road and Transportation Research Association.

Properties

- Fast setting
- Impermeable to water
- Fast reopening of traffic
- Frost and de-icing salt resistant
- Self-compacting
- High flowability
- Can be washed in
- Machinable
- Early washable

Areas of application

- Joint widths from 3 mm | 1/8"
- Joint depths from 40 mm | 1 ½"
- Areas with the highest traffic load
- Surfaces in rail areas
- On lanes
- In hydraulic engineering
- Can be used for old and new plaster
- Concrete blocks and slabs
- Paved areas and natural stone surfaces
- 2 cm | ¾" ceramic tiles in bonded construction method

Technical data

Compressive strength:	60 N/mm²
Bending tensile strength:	9 N/mm²
Solid mortar bulk density:	2 kg/dm³
Static modulus of elasticity:	24,000N/mm²
Storage life:	12 months
Storage:	On pallet, cool and dry in the original sealed bag

light grey | dark grey

ROMPOX® - 302 CEM-TB (TRASS BEDDING)

Ready-to-use, frost-resistant and drainable trass bedding mortar

Modified trass-cement system

ROMPOX® - 302 CEM-TB is a highly water-permeable and frost-resistant bedding mortar for laying pavers and slabs made of natural stone, concrete block and clinker. Trass additives reduce efflorescence after laying. ROMPOX® - 302 CEM-TB is easy to work with, so there is no cracking during application, and it is suitable for surfaces with heavy traffic loads. As a bedding mortar, ROMPOX® - 302 CEM-TB is an important component of the ROMEX®-SYSTEM-GUARANTEE (RSG).

Properties

- Mixed ready to use after mixing with water
- Prevents frost damage
- Reduces waterlogging
- Reduces discoloration and efflorescence
- Highly water-permeable
- Frost and de-icing salt resistant
- Part of the ROMEX®-SYSTEM-GUARANTEE (RSG)

Areas of application

- Layer thicknesses from 30 mm | 1 ¼"
- Around the house and public areas
- Areas with traffic loads up to 40 t
- Outdoor areas with snow melting and de-icing systems (e.g. underfloor heating)
- Bonded construction method

Technical data

Compressive strength:	35 N/mm²
Solid mortar bulk density:	2 kg/dm³
Water permeability:	5 × 10⁻⁴ m/s approx. 15 l/min/m²
Storage life:	9 months
Storage:	On pallet, cool and dry in the original sealed bag

concrete grey

ROMPOX® - 303 CEM-TC (TRASS-BEDDING-COMPOUND)

Binding agent for the preparation of a frost-resistant and drainable trass bedding mortar

Modified trass-cement system

ROMPOX® - 303 CEM-TC is a trass-containing binder for the production of a highly water-permeable and frost-resistant bedding mortar for laying paving and slab coverings made of natural stone, concrete block and clinker. The compound can be mixed with gravel or grit in a volume ratio of 1:3 or 1:4 depending on the load requirements. As a bedding mortar, ROMPOX® - 303 CEM-TC is an important component of the ROMEX®-SYSTEM-GUARANTEE (RSG). Rolling gravel or grit with a grain size of 2-5 mm, 2-8 mm, 4-8 mm or 5-8 mm, which have been certified by the ROMEX® laboratory, can be used to obtain the RSG.

Properties

- Prevents frost damage
- Reduces waterlogging
- Reduces discoloration and efflorescence
- Highly water-permeable
- Frost and de-icing salt resistant
- Part of the ROMEX®-SYSTEM-GUARANTEE (RSG)

Areas of application

- Layer thicknesses from 30 mm | 1 ¼"
- Around the house and public areas
- Areas with traffic loads up to 40 t
- Areas with traffic loads up to 40 t
- Outdoor areas with snow melting and de-icing systems (e.g. underfloor heating)
- Bonded construction method

Technical data

Compressive strength:	15-35 N/mm²
Solid mortar density:	2 kg/dm³
Water permeability:	5 × 10^{-4} m/s approx. 15 l/min/m²
Storage life:	12 months
Storage:	On pallet, cool and dry in the original sealed bag

concrete grey

ZTV N3 usage category

DIN > 3.5 to limitation of use

ROMEX 10 YEAR GUARANTEE 50 YEARS LE RSG 10

ROMPOX® - 304 CEM-HS (ADHESION ELUTRIANT)

Polymer-modified, trass-containing adhesion elutriant for laying of paving and slab coverings

Modified trass-cement system

ROMPOX® - 304 CEM-HS is a trass-containing, polymer-modified bonding slurry for laying natural stone paving, natural and concrete stone slabs as well as clinker and ceramic tiles on bonded bedding. As a bonding agent, it ensures an optimum bond between the bedding and the fixing element. ROMPOX® - 304 CEM-HS is ready to use and can be individually adjusted, depending on the application, to be slurried or trowel-applied. ROMPOX® - 304 CEM-HS is an important component of the ROMEX®-SYSTEM-GUARANTEE (RSG) as a bonding agent between the covering and bedding.

Properties

- Mixed ready to use after mixing with water
- Prevents frost damage
- Frost and de-icing salt resistant
- Waterproof
- High composite safety
- Containing trass cement
- Polymer-modified
- Low chromate
- Part of the ROMEX®-SYSTEM-GUARANTEE (RSG)

Areas of application

- Around the house and public areas
- Areas with traffic loads up to 40 t
- Outdoor areas with snow melting and de-icing systems (e.g. underfloor heating)
- Bonded construction method

Technical data

Grain size:	0–0,5 mm
Yield:	0.52 l/kg
Water permeability:	impermeable
Storage life:	12 months
Storage:	On pallet, cool and dry in the original sealed bag

concrete grey

ZTV N3 usage category

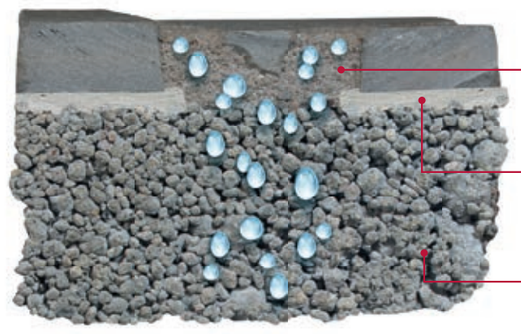
DIN > 3.5 to limitation of use

ROMEX 10 YEAR GUARANTEE 50 YEARS LE RSG 10

Real added value for fabricators and building owners

Two essential aspects of jointing are that the joint is only as good/strong as its superstructure and substructure and that pavement jointing mortar does not absorb any settlement of the surface. A paved surface must be able to transfer the forces acting on it, e.g. from traffic movements, downwards in a dimensionally stable manner. All jointing mortars can only have a supporting or securing effect here, but cannot prevent damage. Therefore, the requirements for a functioning paving or slab surface are careful planning, taking into account the applicable regulations, as well as flawless workmanship and proper use of the surface. According to the valid german regulations ZTV-Wegebau, VOB and ATV DIN 18318:2019 as well as the guideline M FP and M FBgeb of the German Road and Transportation Research Association different construction methods are possible depending on the use/load. ROMEX® products can be used to create the appropriate construction structures for each of these construction methods. If our products are used as a system, the ROMEX®-SYSTEM-GUARANTEE (RSG for short) applies.

RSG offers real added value and security for installers, clients, planners and specialist companies. When laid professionally in accordance with the applicable regulations using our system consisting of bedding mortar, bonding slurry and pavement jointing mortar, we offer a 10-year guarantee on surfaces within the scope of the ZTV-Wegebau. This means that we effectively „take over" the fiveyear guarantee on the construction work that companies have to give their end customers anyway in accordance with the German Civil Code, and give installers and specialist companies an additional five-year guarantee on the surface.



THE ROMEX® SYSTEM

3 Pavement jointing mortar
- No weed growth
- Water-permeable

2 Polymer-modified trass-containing adhesion elutriant
- High composite safety
- Suitable for all stone coverings

1 Trass bedding mortar
- Prevents frost damage
- For pedestrian and traffic loads
- Highly water-permeable

ROMEX® is the first and only manufacturer in the field of paving and slab laying in gardening and landscaping to offer its customers such a guarantee. Take advantage of this unique added value for you and your customers! Contact us for further information and detailed guarantee conditions.

You can find detailed information in our RSG brochure

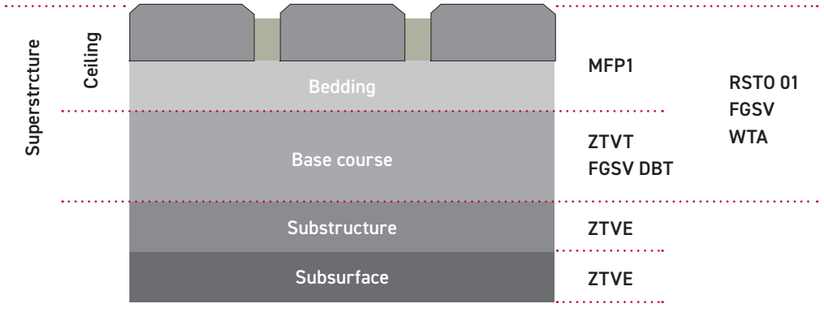
RSG in the bonded construction method

Guaranteed to be the right choice

For all paving and slab coverings made of natural and concrete stone and ceramics

The ROMEX®-SYSTEM-GUARANTEE (RSG) is mainly used within the scope of the german guideline ZTV (Additional technical contract conditions for the construction of paths and squares outside road traffic areas). The ZTV-Wegebau describes all common construction methods for paving and slab coverings for non-public areas and is of great importance for the paving contractor, as it regulates all designs for private clients. Permissible construction methods include the fully bonded construction method and the mixed construction method with bonded bedding for areas that are walked on and for areas that are driven on with vehicles weighing up to 3.5 tons. Ceramic slabs in usage category N1 with a nominal thickness of less than 3 cm must be laid in a bonded bedding and with a fixed joint.

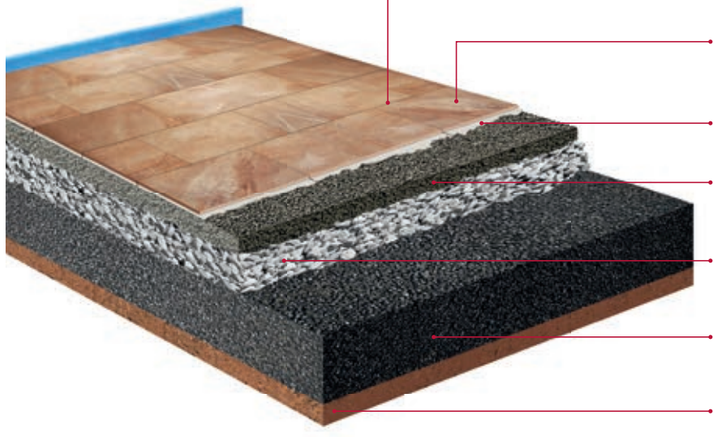
Our high-quality trass bedding mortars are used in fully bonded construction and mixed construction with bonded bedding. These include ROMPOX® - 302 CEM-TB, a ready-mixed bedding mortar that is only mixed with water, and ROMPOX® - 303 CEM-TC, a compound for producing a bedding mortar, as a more cost-effective alternative for larger construction projects. Both variants are highly permeable to water. This means that, on the one hand, water and moisture cannot rise capillary in the bedding layer and, on the other hand, water that penetrates the surface is drained downwards. The trass mineral binds lime particles from the Portland cement and neutralizes them. The major advantage is the greatly reduced risk of waterlogging, efflorescence and discoloration compared to conventional Portland cement products without trass. Our plastic-modified bonded slurry ROMPOX® - 304 CEM-HS is used as a bonded agent between the bedding and the covering. The final step is one of our pavement jointing mortars that meets the requirements. This system, which has been tried and tested for decades, forms the basis of our RSG. With the professional installation of these products, you can create a durable, permanently functional surface and also benefit from our system guarantee.



When using ROMPOX® - 303 CEM-TC, in the ROMEX®-SYSTEM-GUARANTEE, aggregates $^{2}/_{5}$; $^{2}/_{8}$; $^{4}/_{8}$ or $^{5}/_{8}$ mm (usually rolled gravel/grit) can be used, which are tested and certified by the ROMEX® laboratory before use.

ROMEX® recommends: Get your bedding mortar from certified concrete filling stations!

Application example for ceramic tiles in accordance with german regulations for the utilisation category 1 (ZTV-Wegebau)



ROMEX®-Pavement jointing mortar
(according to ATV DIN 18318 requirements)
Permitted: EASY, ECOFINE, DRAIN, D1
Joint width: 3-10 mm
Compressive strength: ⩾ 5 N/mm²

Ceramic plate
Minimum panel thickness: 2 cm
Slip resistance according to DIN 51130: at least R10

ROMEX®-Adhesion elutriant
Adhesive tension: Without loss of bond

ROMEX®-Trass bedding (in accordance with ATV DIN 18318 requirements)
Compressive strength: ⩾ 4 N/mm² on the finished product
Thickness: ⩾ 6 cm

Base course
Gravel base course 0.32 mm or 0.45 mm
Thickness: ⩾ 10 cm

Frost protection layer
Gravel base course 0.32 mm or 0.45 mm
Minimum thickness: 27-30 cm depending on frost sensitivity class

Contiguous floor

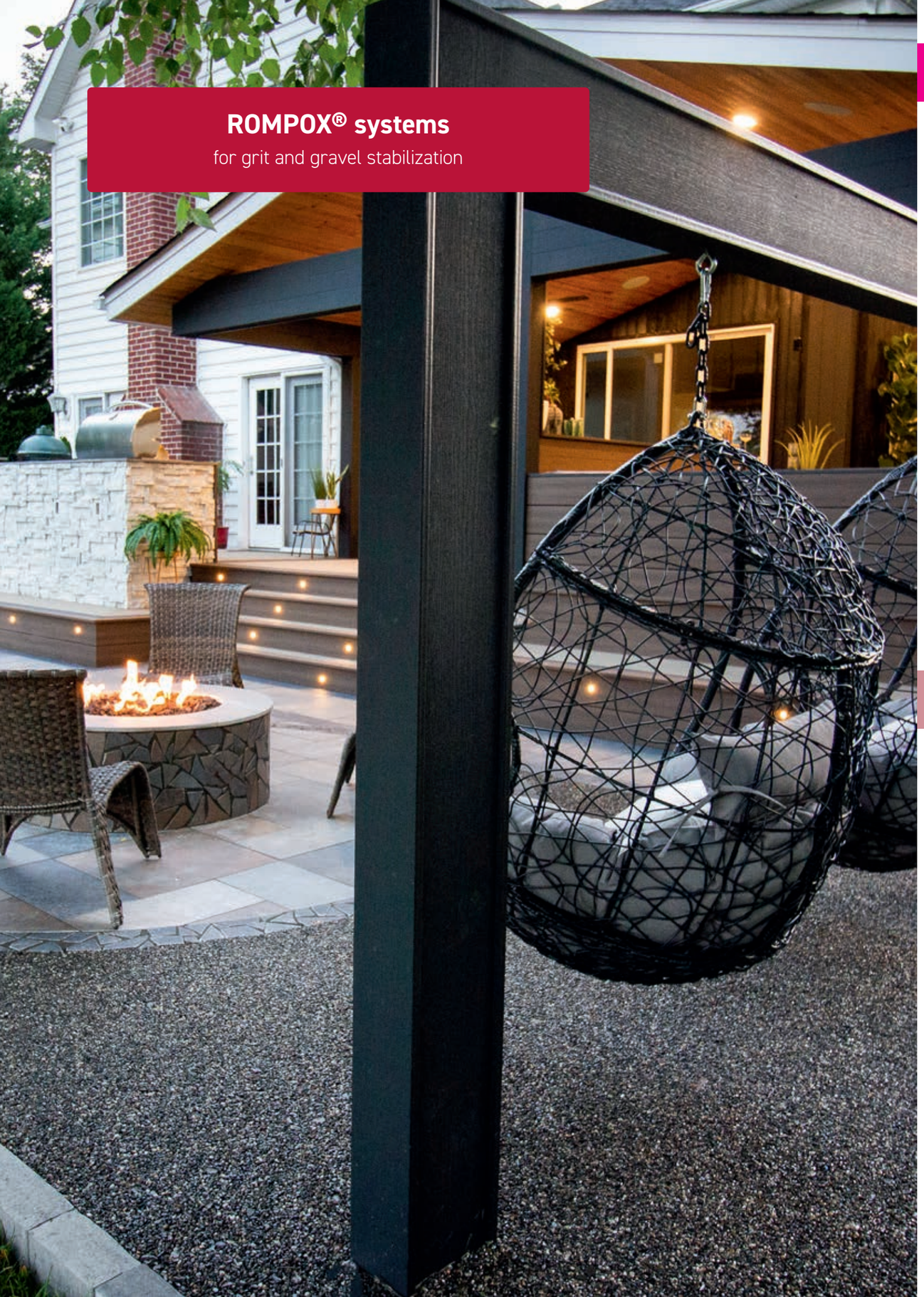
Trend theme ceramics

Laying 2 cm thick ceramic terrace tiles

The professional installation of ceramic tiles less than 2 cm thick is not regulated for gardening and landscaping and is not a recognized technical rule. According to the ZTV, ceramic tiles with a tile thickness of 2 cm are only approved for use category N1. For N2, the nominal thickness of the tile must be at least 3 cm. The tiles must be sufficiently slip-resistant (at least R10) and must not exceed a length-to-width ratio of 3 to 1.

Permitted construction methods in use category 1:

- Fully bonded construction
- Mixed construction with bonded bedding and fixed joint
- The maximum length of the panel must not exceed a nominal dimension of 100 cm



ROMPOX® systems

for grit and gravel stabilization

ROMPOX® - 201 DEKO UV NEW!

The ultra-modern, UV-stable grit and gravel binder for all areas of application

Modified 2-component synthetic resin system

ROMPOX® - 201 DEKO UV is a high-quality 2-component system for stabilizing almost all grit and gravel of any color. The gravel binder is characterized by 100% UV resistance and very high strength values. ROMPOX® - 201 DEKO UV can be used to create durable surfaces, also with regard to barrier-free path construction. Thanks to the extremely high water permeability, these surfaces contribute to sustainable surface unsealing. The stabilization prevents grit or gravel from being removed and scattered, which reduces the frequency of maintenance and also enables quick and easy cleaning using brooms, leaf blowers or high-pressure cleaners.

Properties

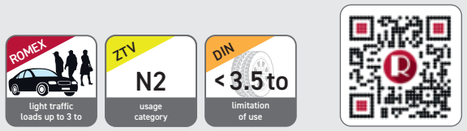
- UV-stable
- High strength
- Low viscosity
- Very highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- No PU application license required
- Firm to walk on
- Aliphatic

Areas of application

- Surface depths from 20 mm | ¾"
- Areas with traffic loads up to 3 t
- For all grit and gravel, especially for light-colored rocks
- For stones containing calcium carbonate such as marble, chalk and sand-lime bricks
- Garden paths and flower beds
- Splash protection around the house
- Private driveways and parking spaces
- Publicly used footpaths
- Tree pits

Technical data

Compressive strength:	14.7 N/mm²
Bending tensile strength:	5.5 N/mm²
Solid mortar bulk density:	1.7 kg/dm³
Water permeability:	5.6×10^{-3} m/s approx. 335 l/min/m²
Storage life:	12 months
Storage:	Frost-free, dry



ROMPOX® - 202 DEKO EP (PROFI-DEKO)

The grit and gravel binder for dark stones

2-component epoxy resin system

ROMPOX® - 202 DEKO EP is a modern 2-component system for stabilizing dark grit and gravel. The gravel binder is characterized by high strength values and cost-effectiveness. ROMPOX® - 202 DEKO EP can be used to produce durable surfaces, also with regard to barrier-free path construction, which contribute to sustainable surface unsealing thanks to the extremely high water permeability. The stabilization prevents grit or gravel from being removed and scattered, which reduces the frequency of maintenance and also enables quick and easy cleaning using brooms, leaf blowers or high-pressure cleaners.

Properties

- High strength
- Very highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on

Areas of application

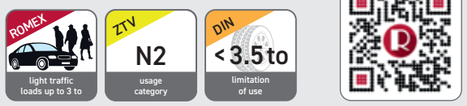
- Surface depths from 20 mm | ¾"
- Areas with traffic loads up to 3 t
- For dark grit and gravel
- Garden paths and flower beds
- Splash protection around the house
- Private driveways and parking spaces
- Publicly used footpaths
- Tree pits

Technical data

Compressive strength:	13.9 N/mm²
Bending tensile strength:	4.8 N/mm²
Solid mortar bulk density:	1.58 kg/dm³
Water permeability:	5.6×10^{-3} m/s approx. 335 l/min/m²
Storage life:	24 months
Storage:	Frost-free, dry

Important

- Not suitable for light-colored grit/gravel or marble, chalk and sandlime bricks, as yellowing may occur.

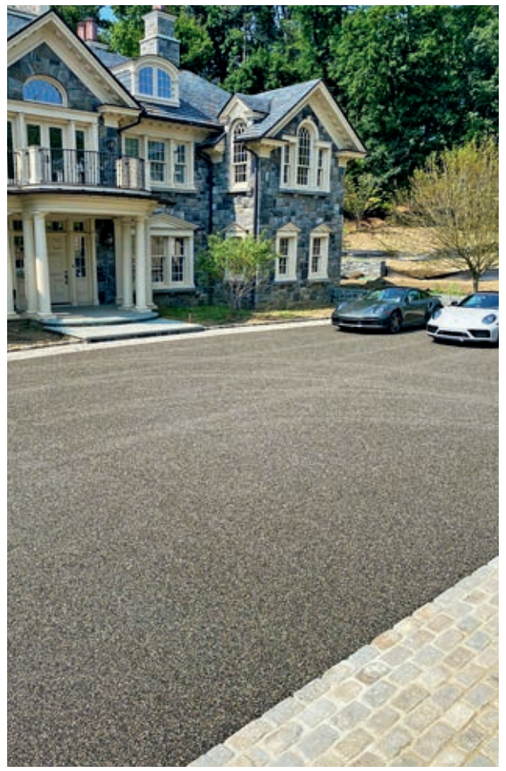


Grit and gravel binders

Designing decorative and barrier-free surfaces

Wide range of applications for slip-resistant and water-permeable surfaces

No more loose stones on the lawn, patio or even in the house. With our gravel binders, grit and gravel can be bonded together to create a non-slip and visually appealing surface. Whether garden paths, flower beds, splash guards, private driveways, car parking spaces or public footpaths and tree pits, our modern synthetic resin binders for washed, dried and dust-free grit/gravel can be used for all garden projects. Thanks to its light stability, ROMPOX® - 201 DEKO UV is particularly suitable for light-colored grit and gravel as well as stones containing calcium carbonate such as marble, chalk and sand-lime bricks. The surfaces are water-permeable and easy to clean. ROMPOX® - 202 DEKO EP is the more productive alternative for all dark stone types.



The modern solution with many advantages

- Creating barrier-free areas
- Economical solution for tree pits
- Water-permeable surfaces and paths
- Decorative and highly water-permeable joints
- Clean, easy to clean surfaces
- Low maintenance costs
- Sustainable surface unsealing

Sustainable surface unsealing through extremely water-permeable surfaces and joints

Our grit and gravel binder systems are ideal for walkways, decorative areas and very wide joints, providing a sure-footed and attractive surface that is perfect for pedestrians. The high water permeability of these systems allows for good drainage and prevents grit or gravel from being worn away and scattered, which in turn reduces the frequency of maintenance. The systems are ideal for public parks, gardens, cemeteries and walkways. The surface is not damaged when cleaned with a broom, leaf blower or pressure washer. Our grit stabilization solutions create durable and sustainable surfaces, also with regard to barrier-free path construction in accordance with the BGG (German Disability Equality Act, §4 and §8). All people should be able to use public areas without restriction and without assistance, regardless of any disability they may have. Our systems can be used to create barrier-free surfaces for squares and paths.

Tree surrounds

Save time and money

The low-maintenance solution

Due to their high water permeability, our grit and gravel reinforcement systems are an excellent choice for inexpensive yet sustainable tree edgings/tree pits. The high drainage capacity in the area of the tree trunk enables good water absorption by the roots, while at the same time avoiding dirt and debris in the area of the tree. Conventional tree pits, on the other hand, are costintensive in terms of material, installing and maintenance. Our systems, on the other hand, are characterized by a short application time, environmental friendliness and lower costs. These are good arguments for local authorities for whom sustainability is important. Even young and newly planted trees can be provided with our „tree pits". However, it should be noted that damage to the tree trunks must be avoided by creating a protective ring around them. For trees with a trunk diameter of 20 cm or more, our product can be applied right up to the trunk, as the tree is now strong enough to give itself room to grow.

The advantages compared to the frequently used metal tree pits at a glance:

- Less expensive to purchase
- Lower follow-up costs
- Easy cleaning
- Wide range of design options
- Water-permeable
- Grows with the tree

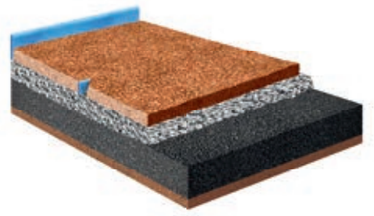
Application

Choosing the right structure and layer thicknesses

Light duty

A solid structure should also be ensured for areas subject to light traffic. Lightly used surfaces are splash guards around the house, flower beds, garden paths or joints. On an unbonded, settlement-free gravel base course, the layer thickness must be at least 3 cm. On a water-permeable, bonded bedding, the layer must be at least 2 cm thick, depending on the grain size. Grit/gravel with a grain size that is not too large should be selected. A maximum grain size of 8-11 mm is ideal. Sealing is optional, but should be carried out regularly every two to three years to ensure a permanently stable surface.

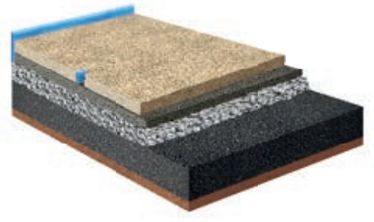
Our recommendation:
Laying on compacted gravel base course.
Grit/gravel: grain size 2-5 mm to 8-11 mm
Gravel binder: ROMPOX® - 201 DEKO UV or ROMPOX® - 202 DEKO EP



Heavy duty

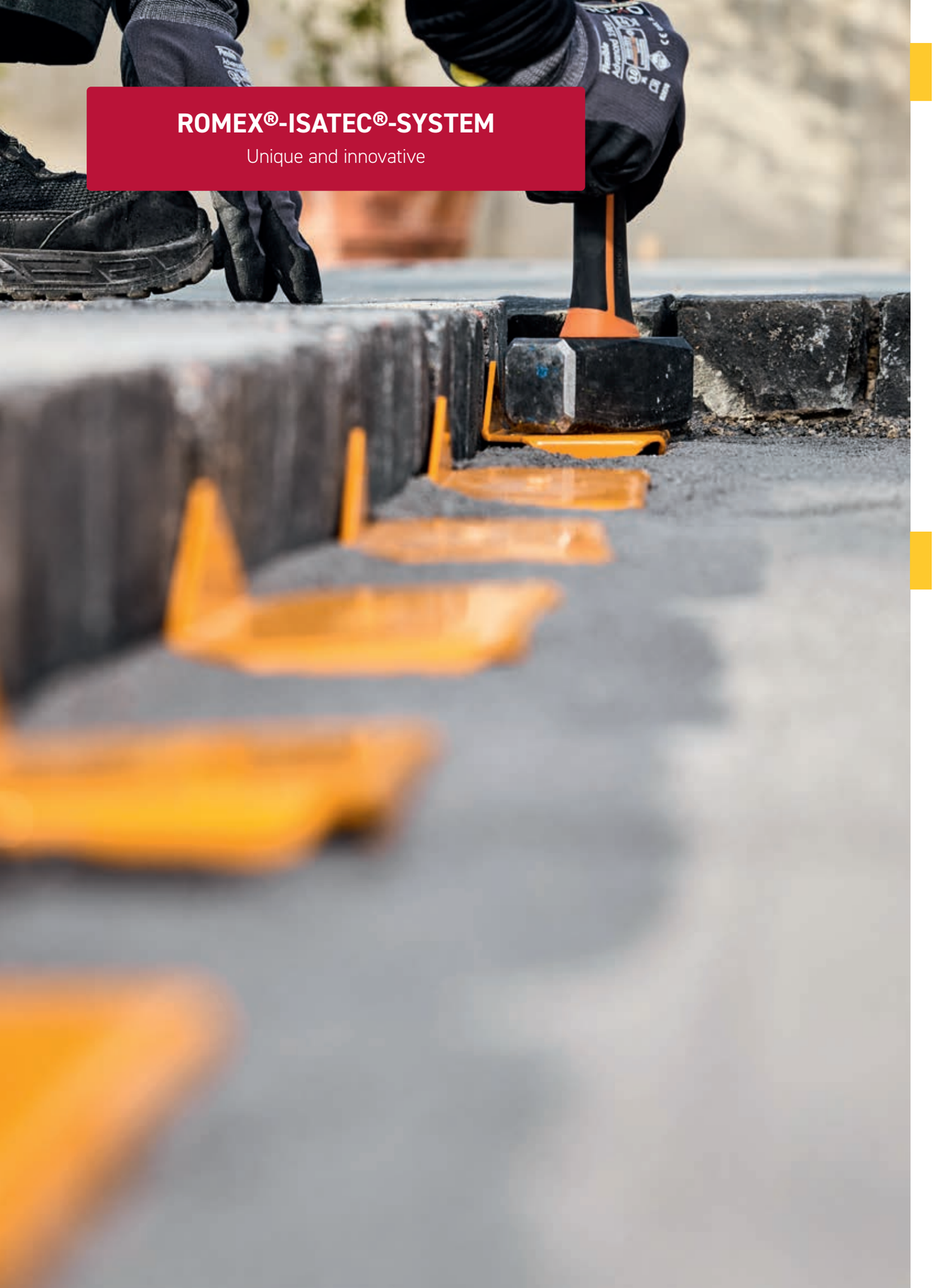
It is important to choose the right structure for a permanently stable grit/gravel surface, especially if it is subject to heavy use. This occurs, for example, in driveways and car parking spaces as well as on public footpaths and tree pits. On an unbonded, settlement-free gravel base course, the layer thickness must be at least 5 cm. On a water-permeable, bonded bedding, the layer must be at least 3 cm thick. It is also important to choose a grit/gravel with a small grain size and to seal the surface immediately after hardening.

Our recommendation:
Laying on bonded bedding.
Bedding: ROMPOX® - 303 CEM-TB, trass bedding compound
Grit/gravel: grain size 1-3 mm to 2-5 mm
Gravel binder: ROMPOX® - 201 DEKO UV or ROMPOX® - 202 DEKO EP
Sealing: 200-300 g/m² with the same grit binder



Wash, dry, mix
Grit containing lime and chalk with a high dust content must be washed and dried before use in order to avoid loss of strength. Grit and gravel must be dry when mixing, as an increased moisture content significantly accelerates the curing process. Relative humidity also accelerates the curing process. For 2-component systems, the resin and hardener should first be mixed in a clean container for two minutes before being mixed with the gravel/grit.

Sealing
Tip for better surface strength: Immediately after curing, seal the surface with the same binder system using a fur roller. Required for re-sealing: approx. 200-300 g/m². This process should be repeated approximately every three years. General risk of slipping with polished and/or round gravel. Sprinkle the surface with fine corundum or mix corundum into the sealer.



ROMEX®-ISATEC®-SYSTEM

Unique and innovative

ISATEC® - STOP

Displacement locks

Protected special safety anchors for all installation bracings

ISATEC® special anchors are suitable for all types of dynamic loads and are used to secure traffic areas subject to particularly high loads and to protect them from displacement. The different types of construction ensure that the anchors can be used for almost all types of bracing and stones. The special bending of the metal anchors fulfills three essential functional properties. A forced joint of 8 mm joint width can be guaranteed. The horizontal bearing surface absorbs the dead load of the pavement material and secures the fixation of the displacement protection due to the high bearing weight, while the vertical angulation penetrates into the bedding and base course to prevent displacement of the construction under traffic load.

Properties

- For all types of dynamic driving loads
- Hot-dip galvanized
- Alloyed
- Oil-hardened
- Cam forming

Areas of application

- All laying systems/designs
- Particularly congested traffic areas
- Curve areas and Turning points
- Stop sections
- Slope sections
- Bus lanes
- All about fixtures
- Unbonded construction method
- Unbonded construction method with bonded base course

Technical data

Steel grade:	Cold rolled plate, special tempering
Corrosion protection by hot-dip galvanizing:	Min. 10µ
Powder coating:	Min. 80µ
Storage life:	Unlimited
Storage:	Dry

ISATEC® - FLEX

Visco-elastic joint

Flexibilized 2-component epoxy resin system

ISATEC® - FLEX is the first and only standard-compliant, viscoplastic 2-component special jointing mortar on the market. With optimum functional properties and a maximum elongation of 9.9 %, the mortar can be used in bonded and unbonded construction. The special jointing mortar absorbs the movements of the covering that occur in unbonded construction. The high flank adhesion virtually eliminates flank cracking. To secure traffic areas subject to particularly high loads and prevent displacement, the joint seal is installed in combination with ISATEC® - STOP displacement protection. ISATEC® - FLEX fulfills all requirements for use categories N1-N3 in accordance with german regulations ZTV-Wegbau and guidelines of the German Road and Transportation Research Association.

Properties

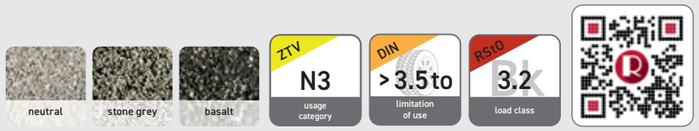
- Resistant to street cleaning vehicles
- No weed growth
- Highly water-permeable
- Frost and de-icing salt resistant
- High-pressure cleaner resistant
- Firm to walk on
- Can be applied in drizzle

Areas of application

- Joint widths from 5 mm | ¼"
- Public areas
- Unbonded construction method
- Joint closure for the upper 3 cm
- Surfaces with traffic loads up to 25 t, in combination with ISATEC® - STOP
- Squares, roads and paths
- Concrete blocks and slabs
- Paved areas and natural stone surfaces

Technical data

Deflection at breaking load:	11.8 mm
Bending tensile strength:	1.28 N/mm²
Centric tensile strength:	0.44 N/mm²
Path to maximum force:	15.8 mm
Static modulus of elasticity:	14 N/mm²
Weathering rate according to CDF test:	25 g/m²
Solid mortar bulk density:	1.41 kg/dm³
Water permeability:	6.6 x 10^{-5} m/s approx. 0.4 l/min/m²
Maximum elongation:	9,9 %
Storage life:	12 months
Storage:	Frost-free, dry



ISATEC® - FLEX as joint closure of the upper 2-4 cm of an unbonded paving surface

The German Concrete Association for Roads, Landscapes and Gardens (SLG) confirms in agreement with the German Working Committee 6.6 "Paving slabs and slab coverings" (FGSV) that the type of construction in which only the upper 2-4 cm of the otherwise unbound joint is filled with a synthetic resin-bound or synthetic resin-modified joint filling is not a mixed construction method within the meaning of the ZTV-Wegebau.

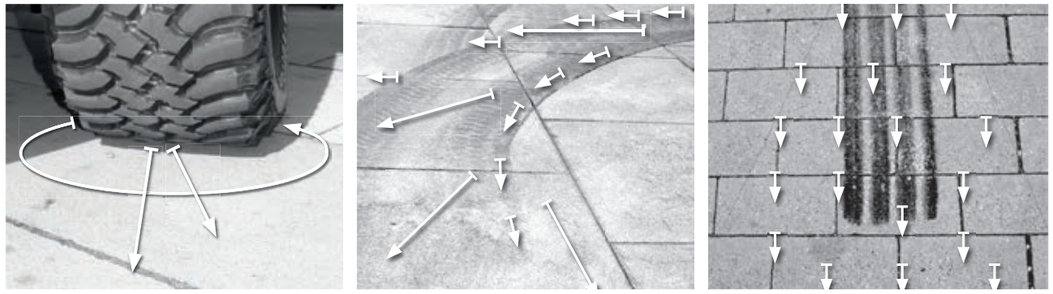
In their opinion, this type of construction should be referred to as an unbonded paving surface or unbonded slab covering - both conceptually and structurally. The prerequisite for this is that the load transfer within the pavement is ensured by the unbonded part of the joint. ISATEC® - FLEX fulfills this requirement as a viscoplastic/permanently elastic joint closure for traffic-loaded surfaces and is the solution for the joint closure of the upper 2-4 cm of an unbonded paving surface.

Anti-slip device

Recognized and reliable displacement protection

Displacements are damage

A displaced surface and a broken panel are a damage and an optical defect. Ultimately, this impairs the functionality of the overall surface. It is important to prevent such damage as completely as possible. They mean trouble, additional costs and wasted time.



Heavy vehicles in motion develop static and high dynamic forces

Detailed information in the ISATEC® brochure

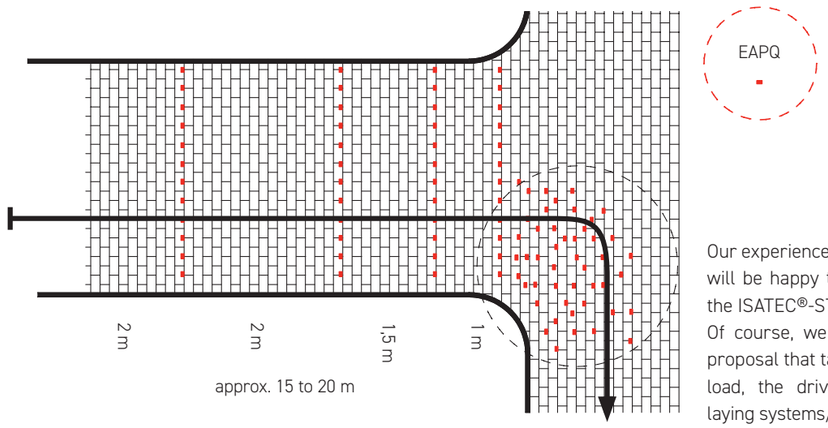
Awarded. Recognized. Safe. Pioneer of permanent anti-displacement protection - with guarantee

ROMEX® is a pioneer in the field of displacement protection for large-format slabs and paving made of natural stone or concrete. Years of development work with experts from the road construction industry make our system solutions unique in their kind and offer the best protection against displacement and damage. The use of our ROMEX® - ISATEC® system solution is underpinned by the precise statements on the use of additional displacement protection, which are included in the MFG 2014 (Information sheet for large formats made of concrete or natural stone under traffic loadregulations) and published with the addition "R2" - state of the art. This protected project solution, including a ROMEX®-SYSTEM-GUARANTEE (RSG), is only available in this form from ROMEX®.

Realize projects safely

Displacements are damage and affect the functionality of the entire traffic area. Therefore, areas under traffic load must be protected against displacement in particularly vulnerable areas (source: German FGSV (Research Association for Road and Transportation)) (FGSV)). ISATEC® - STOP special safety anchors are installed in combination with the viscoplastic joint closure ISATEC® - FLEX (Bk3.2 RStO 12 (Load class 3.2 according to guidelines for the standardization of the superstructure of traffic areas)) to protect these traffic areas against all types of dynamic driving loads and to prevent the pavement from shifting. While the special anchors counteract the static and dynamic forces, ISATEC® - FLEX, the first and only viscoplastic special jointing mortar on the market, is used as a joint seal for the upper 30 mm of the joint due to its outstanding technical properties in accordance with the data sheet of the The German Betonverband Straße, Landschaft, Garten (SLG) (Concrete Association Street, landscape, garden) on concrete slab coverings for trafficable traffic areas (January 2021). The joint closure strengthens the laying systems/designs and thus the overall system by ensuring that the joint material is not worn out and can permanently fulfill its load-bearing function. A viscoplastic joint seal is ideal, as it can absorb or cushion slight settling processes that occur at the start of use.

It is also important to dimension the superstructure correctly. Studies by industry and the Research Association for Roads and Transportation (FGSV) show that slabs must be dimensioned accordingly under traffic loads. The RStO 12 assumes axle loads of up to 10 tons in its calculations. With modern heavy-duty vehicles, these axle loads can even be up to 11.5 tons. Not only do high dynamic driving forces occur here, but high static forces must also be absorbed by the dead weight of the heavy vehicles. In specialist circles, this is referred to as „inclined main tension". Consequently, not only the fracture behavior of the slab, but also the problem of displacement must be taken into account during dimensioning. Additional displacement protection for slabs and paving for surfaces in the unbonded construction counteracts the forces caused by high traffic or heavy vehicles (e.g. buses or trucks) and protects the pavement from displacement. This displacement protection can be provided by conservative measures such as deep kerbs, steel rails, etc. Or through the modern ISATEC® system, which saves time and money and creates confidence with the ROMEX®-SYSTEM-GUARANTEE (RSG).



Our experienced planning technology staff will be happy to assist you in positioning the ISATEC®-STOP safety anchors.
Of course, we also draw up a planning proposal that takes into account the traffic load, the driving relationships and the laying systems/designs taken into account.

ROMEX® additional products

Making life easier

ROMPOX® - POWERclean

The powerful synthetic resin cleaner

For cleaning cured EP pavement jointing mortar residues, even after a long, completed curing process

ROMPOX® - BASIC CLEANER EXTRA

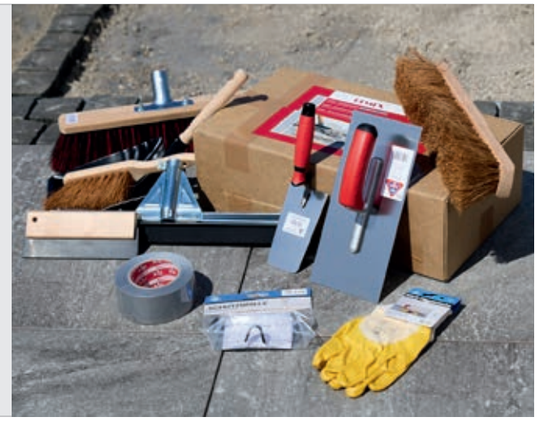
The extra strong basic cleaner

For cleaning surfaces previously treated with ROMPOX® - POWERclean and for thin synthetic resin films

ROMEX® - APPLICATION SET

The application tools for professionals

- Room broom coconut - 40 cm
- Tornado hall broom - 40 cm
- Coconut hand brush - 28 cm
- Metal dustpan
- Trowel
- Bucket ladle
- Hand rubber slider
- 2 double-lipped sponge rubber wipers reinforced - 45 cm
- Fabric adhesive tape 50 mm × 50 m
- Gloves
- Safety goggles



ROMPOX® - HANDLE SPONGE WIPER

For cleaning paving and slabs after jointing with ROMPOX® - 301 CEM-PF and for reducing the synthetic resin film immediately after jointing

Tip: To reduce the synthetic resin film that forms after each jointing, clean the stone surface immediately after sweeping with ROMPOX® - BASIC CLEANER EXTRA and water in a ratio of 1:20. Do not use with ROMPOX® - EASY and ROMPOX® - ECOFINE, as this can lead to undesirable discoloration of the joints. Tests on an inconspicuous area are always advisable.

Technology

Using ROMEX® products safely

Handling synthetic resins

Uncured individual components can cause physiological effects due to their reactivity. Therefore, our technical data sheets and the installation guidelines of the German trade associations (www.bgbau.de) must be observed. Skin contact with the mortar, especially with the binder, must be avoided by taking simple protective measures, such as gloves, to prevent undesirable reactions. Ensure adequate ventilation when working in closed rooms. Once the reactive resin has cured, there is no longer any danger, as the reactivity with possible reactants such as air or water is no longer present or only to a negligible extent under the given conditions. This is referred to as chemically inert building materials (inert = Latin for inactive, uninvolved, inert).

Avoid damage in planning and execution

Damage such as subsidence, loose, tilted stones, ruts, displacements etc. are often the result of poor planning or execution. If damage to the joint is detected, the quality of the joint is initially called into question. In principle, however, pavement jointing mortar cannot absorb subsidence of the substructure and superstructure.
The project should be carefully planned and the structure dimensioned according to the expected load. The work should then be carried out in accordance with the applicable regulations and building physics principles. All important information, in particular on jointing with our jointing systems, is summarized on the following pages.

Application

Planning and application notes

Before jointing

Weather
Unfavorable weather conditions can have a negative effect on the application result. It is strongly recommended that you read and check the product labels, application instructions and climatic conditions before starting work. Very hot, cold or damp weather requires planning and, if necessary, additional equipment and measures. When using our synthetic resin mortar under cold and/or damp conditions with low temperatures and high humidity, the curing time is extended. Dew or rain during the curing phase can lead to white-grey discoloration, reduced final strength or sanding of the joint. Our grit and gravel binders should be applied at plus temperatures and must not be used on frozen substrates. During the cold season, it may be advisable to store the stones in heated rooms and slightly warm the binder in a water bath to accelerate the reaction of the resin and shorten the curing time. The surface must be protected with a suitable covering and heating solution for at least 24 hours after laying.

Check the suitability of the stone
In principle, almost all types of stone are suitable for jointing. Very rough or porous stones should be tested for their sweeping behavior in order to ensure that jointing is as residue-free as possible. For this purpose, damp quartz sand is poured onto the surface and swept off with a broom. In the case of highly absorbent stones, a significantly thicker resin film may remain on the surface. It is advisable to create a sample surface. Some patio slabs are provided with a coating by the manufacturer. Before jointing with a 2-component pavement jointing mortar, check with the respective manufacturer whether jointing with synthetic resin is possible. Our 1C jointing solutions are unproblematic when jointing coated slabs. When stabilizing grit and gravel, it is generally important to ensure that all grit and gravel are washed and dried before use in order to avoid loss of strength. The choice of binder depends on the grit/gravel used and the expected load. As a general rule, the higher the expected load, the smaller the stones should be selected.

Working from one batch
As our products are natural building materials, natural color differences cannot be completely ruled out. Each construction site should always be served from one delivery/batch. In the case of surfaces that are jointed again after a longer interruption, color differences may occur, but these will even out when exposed to the weather.

Movement joints
In principle, sufficient expansion joints must be planned for paving and gravel surfaces, especially for larger surfaces, in accordance with the regulations and building physics principles. Expansion joints in the substructure must be covered. Overhanging components and installations must be provided with edge insulation strips.

Preparation of the surface to be jointed
The stone surface must be cleaned of soiling such as cement residues, dust, rust, oil, etc. using suitable agents. Otherwise, the dirt will be trapped under the resin film and cannot be removed until the resin film has weathered off. The joints must be cleaned so that they are free of sand/grit, dirt, old joint material, roots and organic components. Suitable means/methods such as high-pressure cleaning, compressed air lances, joint scrapers or vacuum cleaners must be used for this purpose. Adjacent surfaces that are not to be jointed must be masked to avoid resin stains.

During jointing

Tools
It is important to use the right and, above all, clean tools. Use a sponge rubber squeegee for jointing, a coarse street broom for sweeping and a soft coconut broom for final cleaning. Suitable protective gloves and, depending on the product, safety goggles must be worn during application. We recommend our ROMEX® - APPLICATION SET (page 41).

Application
In order to make optimum use of the flowability of our 2C pavement jointing mortar, the mortar should be poured out in three to four places. If the mixed mortar is not fully used immediately, the remaining quantity should be stirred again briefly within the specified application time before further jointing in order to achieve optimum flowability again. The entire quantity of a container or mixture should not be poured onto one area, as dark synthetic resin stains may remain in this area, which will only gradually disappear over time due to weathering. Mortar that has already hardened and mortar residue that has been swept off must not be made workable and used again with water or fresh mortar. At temperatures above 20 °C, our pavement jointing mortar reacts more quickly and should therefore be applied to smaller areas and swept off before the next section is jointed. This prevents mortar residue from adhering to the stone surface.

Avoid stains
Tools and work shoes should be cleaned regularly with a water jet during jointing to avoid soiling from binding agents and footprints on the stone surface.

After jointing

Individual grains of sand on the stone surface will disappear over time due to weathering and abrasion. If the surface needs to be protected from rain after jointing, a rain cover (construction foil/covering tarpaulin) should be used. Whether this can be laid directly on the surface or whether air circulation must be ensured between the surface and the rain protection depends on the product and can be found in the relevant product data sheet.
Tools can be cleaned with water immediately after jointing. The joints should be cleaned once or twice a year to ensure good water permeability in the long term.

The most important tips at a glance:

- Careful planning
- Check the suitability of the stone, grit or gravel
- Use suitable joint material
- Observe weather conditions
- Joints must be free of weeds and roots
- Clean the surface before jointing
- Masking the edges
- Plan movement joints
- Use suitable, clean tools
- Create a sample area
- Working from one batch
- Observe application and safety instructions
- Watch application films on romex.de
- Calculate material consumption on romex.de

1-component and 2-component systems

Always the right product

Our high-quality 1C and 2C pavement jointing mortar

Our 1-component systems are suitable for almost all natural and concrete stones and slabs with a joint width of 1 mm or more, depending on the product. 1-component systems harden with atmospheric oxygen. This means that they do not need to be mixed on site and are ready to use immediately. The label-free, water-permeable joint products are also ideal for do-it-yourselfers due to their ease of application. The main areas of application are patios, garden paths, garage entrances and areas around the house.

- Inexpensive quality products
- Very user-friendly, also suitable for do-it-yourselfers
- Solutions for joint widths from 1 mm
- Water-permeable
- Resistant to frost and de-icing salt

Our high-quality 2-component epoxy resin-based pavement jointing mortar systems are used around the house, e.g. in driveways and on parking lots. Almost all natural and concrete stones as well as slabs can be jointed from a joint width of at least 3 mm, depending on the product. After jointing with a 2-component epoxy resin pavement jointing mortar, a wafer-thin synthetic resin film initially remains on the stone surface, which intensifies the color of the stone and protects it from soiling.

- Top products for the professional
- Ideally suited for polygonal slabs and quarry stone slabs
- For medium traffic load
- Water-permeable
- Resistant to frost and de-icing salt

ZTV road construction

Additional, technical contractual conditions

Background and content of the regulations

With the ZTV-Wegebau (Additional technical contract conditions for the construction of paths and squares outside road traffic areas), the standardized and proven construction methods of landscaping, that deviate from the then some of which ATV DIN 18318, have been used as standard for decades and are now presented in a set of rules. This means that jointing with synthetic resin pavement jointing mortar is one of the standards for pavement jointing alongside the traditional jointing methods with sand/grit or cement.
The ZTV-Wegebau thus represents the state of the art and can be used as a contractual condition. ROMEX® pavement jointing mortar fulfills the requirements of the ZTV.

The ZTV is intended to supplement the ATV (General Technical Terms of Contract) in Part C of the German Procurement and contract regulations for construction services) (VOB/A). According to Section 8 (5) VOB/A, special agreements may also be included in the ZTV if similar conditions apply to certain construction works. The ZTV-Wegebau provides the contracting parties with a contractual basis, including the VOB/B, but also without a separate agreement, which can meet the requirements for paved surfaces and slab coverings with lower traffic loads. It also contains requirements and regulations for the so-called „bonded construction methods". In addition, completely new and supplementary requirements are defined for the application of the bonded construction method, in particular for the production and execution of bedding and jointing materials.

Reasons for the ZTV:

- DIN 18318 only considers areas affected by traffic and heavy goods vehicles
  - > Gap in the system for landscaping and low-impact areas
- Lack of consideration of the tied construction method
  - > Production of the bedding
  - > Creating the joint
  - > Requirements for the materials to be used

A distinction is made between the following „load classes":
Usage category N1: Surfaces that can be walked on and not driven on by motor vehicles outside of road traffic areas (e.g. terraces, garden paths, paths in domestic gardens, seating areas in parks).
Usage category N2: Trafficable surfaces up to 3.5 t permissible total weight outside of road traffic areas (e.g. garage access roads, car parking spaces).
Use category N3: Trafficable surfaces like N2, but with occasional use by vehicles up to 20 t gross vehicle weight outside of road traffic areas (e.g. care, maintenance and rescue routes as well as fire department, garage and building access roads).

The following construction methods are discussed in detail:
Unbonded construction method Bedding and joint are unbound on bonded/unbonded base course.
Fully bonded construction method Bedding, joints and (upper) base course are bonded.
Mixed construction method with bonded bedding Base course is unbound, joints and bedding are bound.
Mixed construction with unbonded bedding Base course and bedding are unbound, the joints are bound.
Ceramic tiles Regulation of the laying of ceramic tiles from 2 cm tile thickness for use categories N1 and N2.
Water-permeable coverings Areas with paving slabs or slab coverings as well as honeycomb and grid elements whose joints, openings or structure with a high number of spores have increased water permeability.
Greenable coverings Surfaces with paving or slab coverings as well as honeycomb and grid elements whose joints or openings can be planted with vegetation.

The following binders are suitable for bonded joints according to both sets of regulations:

- Cement: ROMPOX® - 301 CEM-PF
- Reactive resins based on epoxy resin: ROMPOX® - DRAIN, ROMPOX® - D1, ROMPOX® - D2000, ROMPOX® - D3000, ROMPOX® - TRAFFIC V2, ISATEC® - FLEX
- Polybutadiene: ROMPOX® - EASY, ROMPOX® - ECOFINE

Water-permeable, bound joints are to be produced with binders made of reactive resin or polybutadiene.

Movement joints

in the bonded construction method

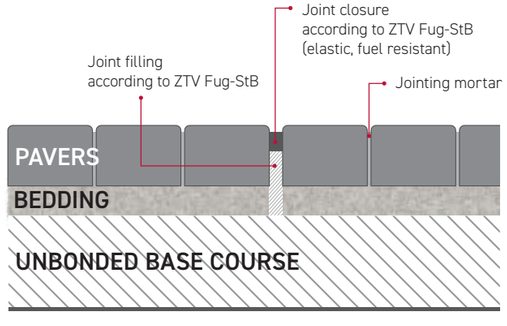
The movement joints required in the bonded construction method have the task of absorbing thermal stresses in order to reduce wild cracks. The occurrence of cracks both in the joint area and within the fastening elements cannot be prevented even by movement joints. The arrangement of the movement joints depends on the block formats and the geometry of the surface and is generally between 4 and 8 m apart. The larger the block formats, the smaller the distance between the movement joints should be. The minimum width of the movement joints is 10 mm. Movement joints from the superstructure must be taken over into the joint. Irrespective of the joint arrangement, movement joints must be created along overhanging components and to rigid edgings to decouple structures and components.

Movement joints can be created according to the ROMEX® system and the german regulation (ZTV Fug-StB) as follows:
1. Apply the lower joint filling with joint tapes/joint roundcord/non-absorbent foam profiles as an auxiliary material. The auxiliary material is fixed 10-20 mm below the stone surface.
2. A permanently elastic joint sealant is then compacted and applied.
3. To visually match the movement joint to the overall jointing, a handful of mortar sand is applied to the compacted mortar using the scattering method before it is mixed with the synthetic resins. The scattered sand is lightly pressed on and the excess carefully removed. Slight, product-related color deviations will even out over time.
4. Any cracks that occur can be easily repaired using the same method during maintenance or repair work.

Connection and movement joints should always be filled with an elastic joint material according to DIN 18540. The color of the elastic joint material should be chosen to match the selected ROMEX® paving mortar as closely as possible. When using natural stone, compatibility should be checked in advance. Follow the instructions of the manufacturer of the joint sealant. According to DIN 52460, the joint sealant used in the movement joints should be checked at regular intervals and replaced if necessary to avoid consequential damage. The sealant is not covered by the warranty.

Movement joints in paving and slab coverings:

Movement joints in grit and gravel-reinforced surfaces:



Water permeability

For natural water circulation

Infiltration is active environmental protection

Environmentally friendly construction and ecological action are central concerns of our time, especially in times of climate change. Both in the private and communal sectors, it is important to create an environment worth living in and to counteract the increasing rate of sealing. This has far-reaching consequences: Sealing surfaces leads above all to increased surface runoff. Heavy rainfall can lead to flooding, the sewage system is overloaded and the water quality of our rivers and lakes suffers. Rainwater is a vital resource and belongs in the natural cycle of the environment and not in the sewage system. Rainwater should be absorbed via permeable paving systems including water-permeable joints or via highly water-permeable, bonded gravel surfaces and fed directly into the soil and groundwater. Functional and attractive surfaces for paths, terraces or driveways do not have to be sacrificed. We offer water-permeable systems for active environmental protection.

Our product data sheets contain a water permeability coefficient for each product. This is a calculated value that generally quantifies the permeability of a soil or rock for water. DIN 18130 provides information on the respective water permeability and is broken down as follows

Water permeability according to DIN 18130:

Very high permeability:	> 10^{-2} m/s
Highly permeable:	10^{-2} to 10^{-4} m/s
Permeable:	10^{-4} to 10^{-6} m/s
Low permeability:	10^{-6} to 10^{-8} m/s
Very low permeability:	< 10^{-8} m/s

It all depends on the grain size

A synthetic resin-based pavement jointing mortar always consists of two components. One component is the binder system (1-component or 2-component), which is responsible for curing and stability. The other component is the filler, which is crucial for water permeability. Our fillers are washed and fire-dried quartz sands in various grading curves. None of the quartz sands contain zero particles, as is the case with cement (cement dust). When jointing, microscopically small cavities are created through which water can seep. The size of the cavities results from the grading curve and determines the degree of water permeability. The great advantage of cavities is particularly evident in winter. Water that is still in the joints when the ground freezes can expand in the cavities. This prevents cracks or fractures in the joints.

The capillary effect in synthetic resin joints

The capillary effect describes the behavior of liquids in solids when they come into contact with capillaries. If, for example, a glass tube is immersed vertically in water, the water in the tube rises against the force of gravity. This effect is caused by the surface tension of the liquid itself and by the interfacial tension of the liquid with the solid surface (in this case glass). For our synthetic resin-bound pavement jointing mortar systems, this means the following: Depending on the pore content or sand grain size, moisture can rise against gravity to varying degrees, allowing the water to evaporate on the surface. In this way, no water remains permanently in the joint, even on substrates with very low water permeability.

Frost and de-icing salt resistance

Maximum protection in winter

Absolutely resistant to the effects of frost and de-icing salt

A significant advantage of synthetic resin pavement jointing mortars over cementitious joint mortars is their frost resistance. Cementitious joints crack due to water expansion when exposed to frost and eventually break as soon as moisture or water penetrates the joint, e.g. through cracks. Synthetic resin-based pavement jointing mortar, on the other hand, is absolutely frost-resistant. Our test reports from independent material testing institutes prove that paving and slab surfaces jointed with our systems are absolutely frost-resistant, even if the substructure is impermeable to water (capillary action). In accordance with DIN 52104 Part 1, corresponding tests with freeze-thaw cycles were passed with flying colors. Absolute resistance to frost and de-icing salt was demonstrated, making the systems ideally suited for jointing paving and slab coverings!

The reason for this result is that our pavement jointing mortar systems have a high number of microscopically small cavities due to their composition, which not only ensure high water permeability, but also provide sufficient expansion space for the ice that forms when exposed to frost. In addition to the frost resistance of all ROMEX® pavement jointing mortars, which has been proven by test laboratories, our customers' decades of experience without frost damage also speaks for itself!

Please contact us to our test reports!

Synthetic resin film

For brilliant results

Finishing and protecting the surface

It should be noted that after almost every jointing with synthetic resin paving mortar, a thin synthetic resin film initially remains on the stone surface, which intensifies the color of the stones and leads to a glossy effect (wet-look effect). Depending on the product used and the stone, the color deepens to a greater or lesser extent. The synthetic resin film and the associated color deepening disappear over time due to natural weathering such as sun, rain and snow, but above all due to mechanical stress on the surface and abrasion. The synthetic resin film remains for up to several months on surfaces with little mechanical stress and little weathering, while it usually disappears within a few weeks on heavily frequented surfaces in public areas (streets, squares, railroad stations). On flat surfaces, which a r e generally exposed to a significantly higher load and stronger weathering, the synthetic resin film disappears more quickly than on flanks, which are generally often lower and less heavily loaded and weathered.

This aspect of resin paving jointing should be discussed in detail with the customer before jointing. The area to be jointed should be pre-wetted with water to see how it will look after jointing. If in doubt, a sample surface should always be created to serve as a reference surface. The intensity of the synthetic resin film can be reduced to a certain extent before jointing by pre-wetting the surface. The synthetic resin film can also be significantly reduced by cleaning the stone surface immediately after sweeping with ROMPOX® - BASIC CLEANER EXTRA and water at a ratio of 1:20.

The facts about the synthetic resin film:

- The jointing leads to a natural intensification of the stone color and acts as a high-quality stone surface sealant that protects the paving from soiling.
- In the case of light, rough and open-pored types of stone (e.g. light, crushed granite), clinker bricks and custom-made products, the synthetic resin film may cause more intensive color deepening.
- When jointing large-format slabs, the synthetic resin pavement jointing mortar should be applied over the entire stone surface in order to achieve an even color deepening on the surface.
- Uneven use, loading and weathering of the surface may cause temporary differences in coloration on the stone surface.
- During the weathering phase, the stones may give the impression of turning white-greyish in color. This is merely light refraction in the dissolving synthetic resin film. This phenomenon can easily be prevented by cleaning or treating the stones with color-enhancing products.
- A resin film is generally not a „defect in workmanship"; the quality of the surface is not impaired by this.

To minimize the synthetic resin film that forms after each jointing, the stone surface is cleaned immediately after sweeping with ROMPOX® - BASIC CLEANER EXTRA and water in a ratio of 1:20.

Do not use with ROMPOX® - EASY and ROMPOX® - ECOFINE, as this can lead to undesirable discoloration of the joints. Testing on an inconspicuous area is always advisable.

Cleaning and care

Tips and tricks for flawless results

For permanently beautiful and functional paving surfaces

The correct use of a flooring surface preserves its beauty and functionality and reduces the amount of maintenance and cleaning required. Nevertheless, the surface must be cleaned from time to time. The correct cleaning of the flooring materials is very important. The timing of cleaning depends on individual requirements and the degree of soiling. Some people appreciate the natural patina (e.g. graying, algae and moss formation, etc.) that paving and slabs take on over time. Others, on the other hand, value the fact that the surfaces are always clean and change very little. In this case, the intensity and frequency of cleaning is increased. But one thing always applies: the compatibility of the cleaner and the type of cleaning must be guaranteed with the material to be treated. In the case of concrete and various natural stones, there is a risk of the surface being attacked by acidic cleaning agents. When cleaning synthetic resin or cement joints, always ensure that the cleaning agent and joint filler are compatible. Algae and moss removers, impregnations and color enhancers, which are available from DIY stores or specialist building materials retailers, are recommended for cleaning and maintaining paved surfaces. These generally do not harm our pavement jointing mortar.

Cleaning the joints

Regular cleaning of the joints ensures permanent water permeability. The best way to clean the joints is with a high-pressure cleaner. It is important to ensure that the joints are not cleaned with high-pressure cleaners above 125 bar. In addition, a minimum distance of 30 cm should be maintained between the joint and the high-pressure cleaner. With ROMPOX® - EASY, a minimum distance of 40 to 60 cm must be maintained, depending on the high-pressure cleaner used.

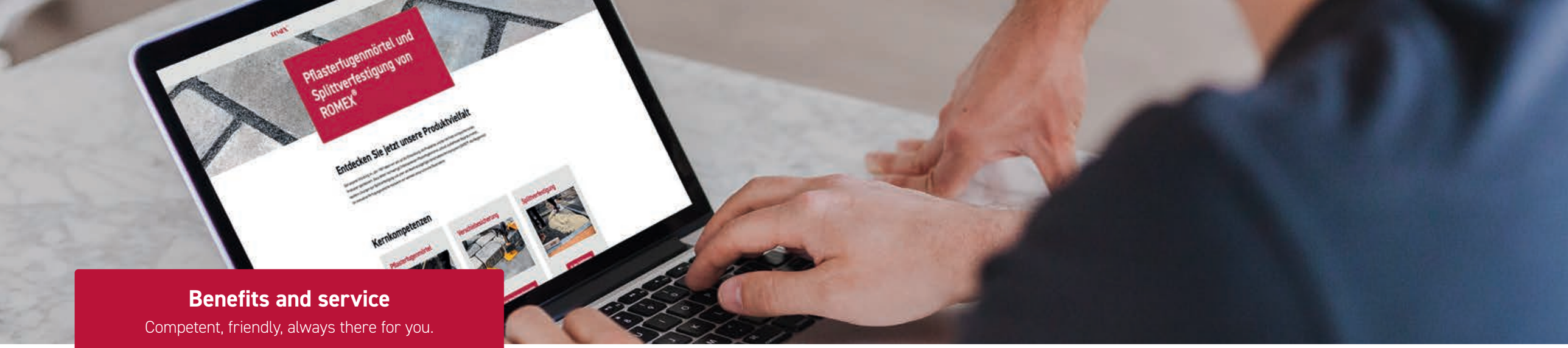
Weathering synthetic resin film

Particularly with reddish-brown and black types of stone, ceramic tiles and porphyry paving, apparently greyish-white discoloration (stains or haze on the stone surface) may occur temporarily during the weathering phase. They are caused by the refraction of the incident light on the microscopically broken synthetic resin layer. These discolorations do not affect the quality or durability of the material and usually disappear by themselves through weathering and use. Alternatively, they can be removed with special agents such as ROMPOX® - POWERclean. Alternatively, the color intensity previously achieved by the synthetic resin film can be restored by using a color intensifier.

Maintenance of compacted grit and gravel surfaces

It is always advisable to lay a fleece under the grit/gravel surface to prevent weeds growing from the ground. As airborne seeds and grasses can settle on the surfaces and find a place to grow, resin-bound grit and gravel surfaces should be cleaned regularly. The surface should be resealed approximately every three years to ensure a durable and stable surface for years to come.

We would like to take this opportunity to expressly point out that manufacturers of natural stone, and in particular concrete stone, advise against cleaning surfaces with high-pressure cleaners so that the structure and color of the stone is not negatively affected. As a general rule, cleaning agents, especially those containing acids, alkalis and solvents, should first be tested on a concealed or inconspicuous area or on a sample. This is the only way to avoid costly and unsightly surprises.



Benefits and service

Competent, friendly, always there for you.

ROMEX® Academy

Immerse yourself in the world of the ROMEX® Academy and experience learning in a completely new dimension. Our academy offers you the opportunity to take your knowledge and skills to a new level in a relaxed atmosphere. Whether you are a professional with many years of experience in the field of pavement jointing mortar and synthetic resin-based gravel binder or a beginner who is just starting to work with such products, you will find the right courses to advance your work with us.

Our academy is focused on three main areas to meet your individual needs: Face-to-face events at our company headquarters in Meckenheim. There you will experience intensive and practical seminars in a relaxed atmosphere. Here you have the opportunity to exchange ideas with like-minded people, learn new techniques and benefit from the experience of our experts. On the road. We come to you! Our team will visit you on site to conduct customized training courses and workshops directly in the field. Thanks to our online training courses, you can access our extensive range of training courses from anywhere in the world. Learn at your own pace and tailor your training to your individual needs.

Benefit from our experience as a pioneer of modern synthetic resin jointing

Our academy attaches great importance to quality, practical relevance and personal support. We are proud to offer this wide range of training courses to support you in your day-to-day work with products that require intensive consulting. Whether you want to hone your skills, expand your expertise or learn about new technologies, you've come to the right place. We look forward to supporting you with your projects. Discover what we have to offer and contact us to find out more about our academy. Paving starts here!

Register at romex.de

Face-to-face event

The all-in variant at our head office

- At our company headquarters in Meckenheim
- 4x per year
- Theory and practice
- Various lectures

On the road

The smart way of training directly at your premises

- Lunch ´n Learn in your company
- Individual appointments
- Theory and practice
- From March to October

Online training

For those who prefer to be flexible 24/7

- Online training
- Individual appointments
- Theory and online certification
- Informative and up to date

Advertising material and Point of Sales advertising

Posters for customer stoppers

Roll-up display

Counter display incl. flyer

Advertising banner