



ROMPOX® - 303 CEM-TC (formerly TRASS-BETTUNG-COMPOUND)

Binder for the production 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 chippings 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 chippings with a grain size of 2-5 mm | $1/16''-1/4''$, 2-8 mm | $1/16''-3/8''$, 4-8 mm | $1/8''-3/8''$ or 5-8 mm | $1/4''-3/8''$, 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 permeable to water
- frost/de-icing salt resistant

Areas of application

- for layer thicknesses from 30 mm | 1 1/4"
- around the house and public areas
- areas with traffic loads of up to 40 to
- for the bound construction method
- MFP Geb (Information sheet for paving with paving slabs and slab coverings in bonded design)
- part of the ROMEX® SYSTEM GUARANTEE (RSG)

Technical data

Compressive strength: 15-35 N/mm² | 2175-5076 psi

Solid mortar bulk density: 2 kg/dm³ | 1.15 oz/in³

Water permeability: 5×10^{-4} m/s | 70.88 iph approx. 15 l/min/m² | 3.96 gal/min/sqft

Shelf life: 12 months

Storage: on pallet, cool and dry in the original sealed bag



ROMEX®

ROMPOX® - 303 CEM-TC

CONSTRUCTION SITE REQUIREMENTS

Planning: The substrate should be constructed in accordance with the expected traffic load. The regulations and information sheets for the construction of paving surfaces must be observed. All fixing elements must be treated with ROMPOX® - 304 CEM-HS bonding slurry before laying in the bedding mortar. In the case of impermeable substrates, drainage of seeping water must be ensured. Standing water must be drained away on the impermeable layer by means of filter layers and slopes. Depending on the size and shape of the surface, sufficient expansion joints must be planned according to physical principles. The use of ROMEX® SYSTEM-GUARANTEE (RSG) is ideal. For optimum processing, the use of ROMEX® processing tools is recommended.

Preparation: The substrate must be load-bearing, stable and water-permeable. Water-impermeable load distribution layers (screeds), such as house connection areas, must be laid with a gradient of at least 1.5-3%, as must the slab coverings. Any water that accumulates must be drained away using appropriate drainage measures. For sealed outdoor areas and on water-bearing levels with partial puddle formation, the installation of a suitable capillary-breaking drainage mat is recommended.



PROCESSING

Mixing: Mix the bedding compound (25 kg | 55 lbs) in a ratio of 1:4 with filler (e.g. rolled gravel/chippings 4-8 mm | 1/8"-3/8") in a free-fall/compulsory mixer or with a professional mixing paddle in a clean mixing vessel with 9 l. | 2.37 gal of clean, cold water until earth-moist. Adjust the mixture by adding additional water until the mortar mixture is slightly glossy and can be formed into a compact ball. Avoid lump formation. Water requirement up to 11 l. | 2.90 gal depending on the required consistency. Mixing time 3 minutes. The mortar is ready to use immediately after mixing.

Mixing ratio for 25 N | 3625 psi compressive strength:

1 volume fraction 303 CEM-TC	Example: 10 l 2.64 gal
4 volume fractions of filler (e.g. rolled gravel/chippings 4-8 mm 1/8"-3/8")	Example: 40 l 10.56 gal
or 1 volume fraction 303 CEM-TC	Example: 10 kg 22 lbs
6 weight fractions of filler (at 1.5 g/cm ³ 0.05 lb/in ³ chippings density)	Example: 60 kg 132 lbs

Mixing ratio for > 30 N | 4351 psi compressive strength:

1 volume fraction 303 CEM-TC	Example: 10 l 2.64 gal
3 volume fractions (e.g. rolled gravel/chippings 4-8 mm 1/8"-3/8")	Example: 30 l 7.92 gal
or 1 weight fraction 303 CEM-TC	Example: 10 kg 22 lbs
4.5 weight fractions filler (at 1.5 g/cm ³ 0.05 lb/in ³ chippings density)	Example: 45 kg 99 lbs

Application: The thickness of the bedding mortar should generally be 4-10 cm | 1 1/2"-4", depending on the load (load class/use category) and rock (exception is the mixed construction method in the use category N2 of the ZTV Road Construction with a thickness > 10 cm | 4"). Loosely apply the ready-mixed bedding mortar. The fastening elements to be used are pre-treated with ROMPOX® - 304 CEM-HS bonding slurry and placed in their final position at the correct height and hammer-proof. For the joint filling, a joint depth of at least 3 cm | 1 1/4" from the top edge of the fixing elements should be taken into account, and the full height of the stone from traffic load.

Rain protection: Protect the surface with a film after laying. After 24 hours, spray lightly with a jet of water and cover again for 48 hours. The surface must not be subjected to stress until the bedding mortar has reached sufficient strength. In unfavorable weather conditions, a longer period of time may be necessary.

Technical data:

Application time at 20 °C 68 °F: approx. 60 minutes	Re-opening of surface at 20 °C 68 °F: Grouting possible the next day,
Application temperature: 5-25 °C 41-77 °F	accessible after 7 days,
Low temp. » slow curing	trafficable up to 3.5 to (private area) after 14 days,
High temp. » fast curing	fully loadable after 28 days

Consumption kg | lbs per 1 m² | 10,76 sq ft:

approx. 2.5 kg | 5 lbs compound, Corresponds to approx. 18.5 kg | 40 lbs of ready-mixed bedding mortar per cm | inch layer thickness/m² | sq ft

IMPORTANT NOTES

Weather: Unfavorable weather conditions can negatively affect the result of your processing. We strongly recommend that you read and check product labels, processing instructions and climatic restrictions before starting your project. Very hot, cold or wet weather requires planning and additional equipment and measures if necessary. The application of our CEM products should be carried out at temperatures above freezing and must not be laid on a frozen substrate. Lay thermal tarpaulins over the working area in advance to prevent the base course from freezing. Cover the area with an insulated concrete/masonry blanket for at least 24 hours after installation. Cold temperatures dramatically slow down the curing process. Leave the covers on the surface for longer if necessary.

Product-specific instructions: Depending on weather conditions and mortar consistency, jointing with ROMPOX® paving joint mortar can be carried out after 48-72 hours. If possible, use complete containers, otherwise weigh or measure out. In the case of bonded paving and slab coverings, cracks cannot be ruled out as a result of weather influences, temperature fluctuations and traffic loads. Non-drainage-capable base/bedding layers can be damaged by penetrating moisture. **Practical tip:** The simplest method of determining the volume is the so-called „gauging“: In practice, fill the 25 kg | 55 lbs bag of ROMPOX® - 303 CEM-TC into a bucket and mark the fill level with a marker. The rolled gravel/chippings can now be filled up to this mark and the materials are equal in volume.

Occupational safety: The use of impermeable and durable protective gloves, tight-fitting safety goggles and protective work clothing is recommended.

Cleaning and maintenance: Tools can be cleaned with water immediately after use.

GENERAL INFORMATION

Explanations: Water permeability as defined in the „Information sheet for infiltration-capable traffic areas“ (MVV), 2013 edition. Compressive strengths of 15-35 N/mm² | 2175-5076 psi depend on the filler and mixing ratio. Delimitation of use, utilization category and load classes indicate the load-bearing capacities for standardized substructure and superstructure according to German standards in accordance with RStO 12, ZTV Road Construction, DIN 18318.

Legal text: The information printed in this prospectus is based on experience and the current state of science and practice, but is non-binding and does not establish a contractual legal relationship. All previous information becomes invalid with the publication of this prospectus. Illustrations similar. Status: January 2024, subject to change.