

ROMEX[®] - TRASS BED

Frost resistant drainage mortar

Drainage trass bed mortar



Includes Certificate

PROPERTIES

- for pedestrian and traffic loads
- from 3 cm | 1 3/16" layer thickness
- highly water permeable
- prevents frost damage
- lessens waterlogging + discolouration
- ready to use mixture or COMPOUND
- frost and de-icing salt resistant
- easy application
- lessens efflorescence
- Compressive strength > 35N/mm² | 5.076 psi



ROMEX®-TRASS BED COMPOUND

Application

ROMEX®-TRASS-BED COMPOUND is a binding agent for the manufacture of bound, water permeable base courses for the laying of natural stone paving stones as well as natural and concrete stone slabs on a frost resistant subsurface outdoors and it reduces efflorescence .

Construction site requirements: The subsurface needs to be made load bearing, firm and water permeable. Water impermeable load distribution layers (screeds), such as areas with house utility connections as well as any slab coverings that are laid, need to have a slope of at least 1,5-3,0%. Any water that gathers needs to be drained with corresponding drainage measures. In case of any watertight outdoor areas and levels where water flows and partial puddles form, it is recommended installing a suitable capillary-breaking drainage mat.

Recommended mixing ratio:

1 volume part TRASS® BED COMPOUND = z.B. 10kg | 22,05 lbs
4 volume parts filler material (i.e. rolled grit/gravel) 4-8mm | 1/2"-5/16" = z.B. 40kg | 88,2 lbs

Mixing: Mix ROMEX® TRASS® BED COMPOUND in a ratio of 1 to 4 with filler material (i.e. rolled grit/gravel) 4-8mm | 1/2"-5/16" so that it is earth damp, mixing time 2-3 minutes. Water requirement approx. 9% - approx. 3,6-3,8 litres | 0,9 - 1,0gal of cool, clean water per 40kg | 88,2lbs of ready to use mixture. Mix using a pug mill or gravity mixer, for smaller amounts, mixing can be done in a wheelbarrow or mortar tub. After mixing, the mortar is ready for immediate use. Where possible, use the entire container, otherwise weigh the exact amounts needed.

Important: Add the water to the mixer first, then the mortar.

Application:

Natural stone paving stones:

The thickness of the paved stone bed whilst loose, should be 3-6 cm | 1 3/16"-2 3/8" depending on type of stone and expected loads. Mix ROMEX® TRASS® BED COMPOUND in a ratio of 1 to 4 with filler material (i.e. rolled grit/gravel) 4-8mm so that it is earth damp and lay loosely. Paving stones are laid hammer-hard = lay stones individually and hit them 3-4 times with a hammer. When filling the joints, at least 3 cm | 1 3/16" joint depth from the top edge of the stone is required, in case of traffic loads at least 2/3 the height of the stone. After laying, protect the surface with a sheet - after 24 hours lightly spray with water and cover again for 48 hours. Finally, use ROMEX® paving jointing mortar to fill the joints. After 7 days the surface can be walked on, after 14 days it can be driven on by vehicles up to 3,5t (private surface), after 28 days it is fully load bearing.

Paved stones that have been sawed/measured should be treated with ROMEX® ADHESION ELUTRIANT before laying - the same applies to stones that, because of their shape, cannot be hammered into one third of the paved stone bed.

Natural and concrete stone slabs:

In general, slabs should be treated with ROMEX® ADHESION ELUTRIANT before laying.

Application data:

Application time:	approx. 2 hrs. (at +20°C +68°F)
Low in chromate acc. to TRGS 613:	Yes
Material consumption:	approx. 18,5kg/cm layer thickness/m ² 40,8 lbs / 3/8" layer thickness/sqm (approx. 3,7 kg 8,2lbs should be TRASS BED COMPOUND)
Addition of water:	approx. 9% water per mixture
Application temperature:	from +5°C to +30°C 41°F to 86°F, do not use on frozen ground

Technical data:

Compressive strength:	> 15 - 25 N/mm ² > 2.176 - 3.626 psi after 28 days (depending on filler material)
Water permeability value:	≥ 1,42x 10 ⁻⁴ m/s 20,1 iph (depending on filler material)

Storage life: 6 months, dry in original, sealed sack



Fill in water first



Then pour in material and mix



Apply



Level



Lay stones



FINISHED

CONSTRUCTION VARIATIONS

Preparation of subsurface and jointing:

Paving jointing mortars cannot withstand settling of the subsurface. Any expansion joints present in the substructure should be incorporated into the paved stone surface. Expansion joints should be laid according to construction principles. The subsurface should be dimensioned according to the expected traffic loads and be water permeable. Valid regulations should be heeded. ZTVT, ZTVE, RStO, DIN 18318, MFP1 and TL, DNV leaflet, work paper FGSV etc.

Minimum joint depth: $\geq 30\text{ mm}$ | $1\frac{3}{16}"$ with pedestrian loads, $\geq 2/3$ of the height of the stone for traffic loads.

Depending on type of paving stone, a gap remains between joint and bed. For cost reasons, this can be filled with a filter stable, water permeable, firm and shrinkage free filler material, i.e. a high quality sand-gravel mixture or if the joints are wide enough, with ROMEX® TRASS BED (sweep it dry into the joints to the minimum jointing depth and then immediately clean the paved stone surface with a fine water jet spray). Alternatively, ROMEX® paving jointing mortar can be worked into the joint completely..

Minimum joint width: 3-8 mm | $\frac{1}{8}" - \frac{5}{16}"$ depending on ROMEX® PAVING JOINTING MORTAR
For joint widths larger than 15 mm | $\frac{3}{5}"$, the joint depth must be at least double the joint width.

Preparation of stone surface:

Before jointing, the stone surface should be cleaned thoroughly of all soiling such as dirt, oil, rubber residue or rust. Old paving stones: Remove any mortar residue on sides of stones completely.

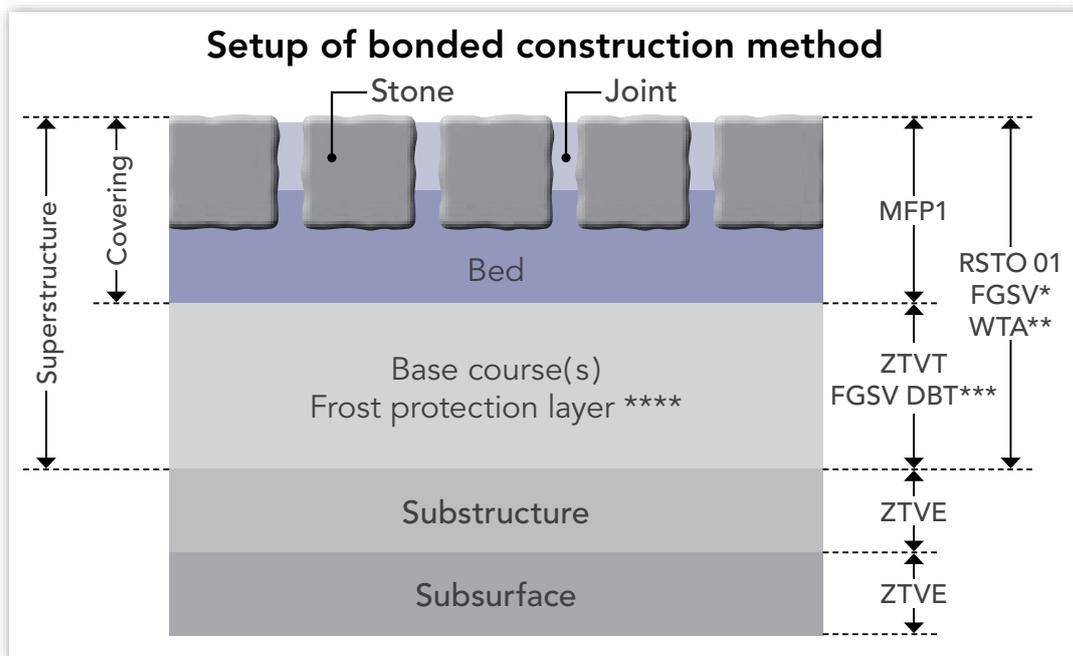
Construction variants for paving:

Basics: The joint is only as strong as it's substructure. Faults in the substructure result in breakage/ cracks, which in turn can lead to damage to intact edge surfaces when subjected to traffic loads.

This applies in general for newbuilds:

- If the paved surface will only be subjected to pedestrian traffic, then the laying of the paving stones/ slabs can be done on firm and settled gravel/sand mixtures, grain size 0/4~0/8. Alternatively: the use of ROMEX® - TRASS BED guarantees a non-settling bed.
- Paved surfaces subjected to vehicle loads, are laid on the ROMEX® - TRASS BED, according to the expected loads. Please take note of the following sketches.

See the following diagrams in this regard:



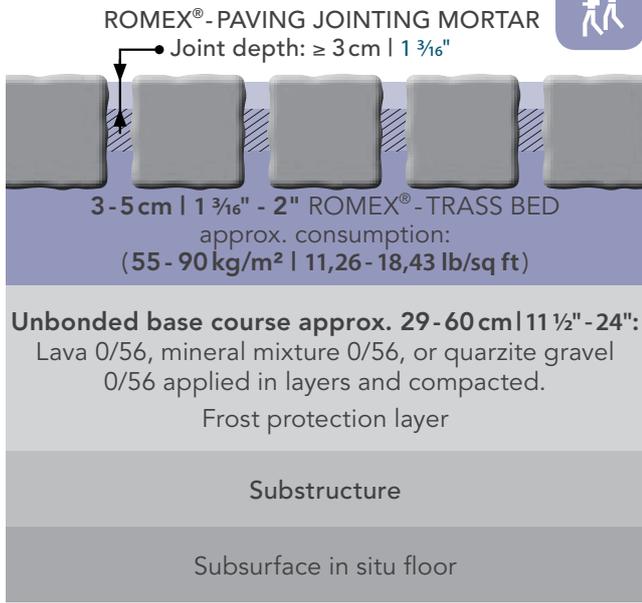
* FGSV Work paper surface fixing with paved stone coverings, bonded construction - Issue 2007 (no.: 618/2)

** WTA Leaflet – Bonded construction method historical paving stones (no.: E 5/21: Issue 01/2009/D)

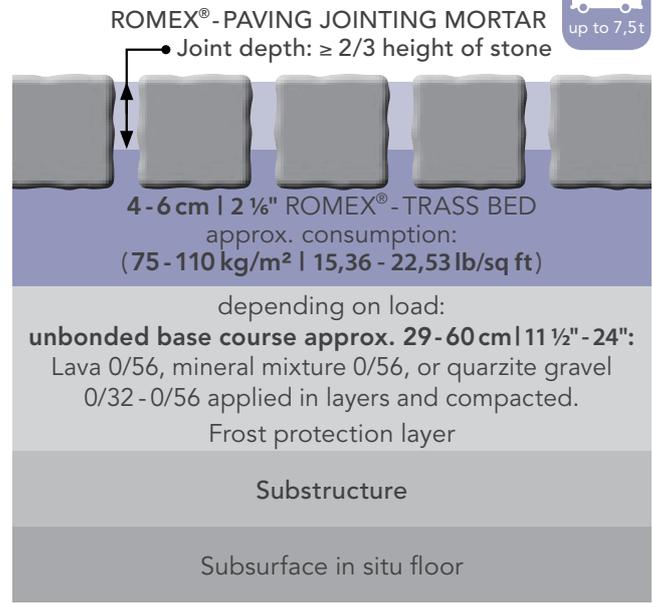
*** FGSV Leaflet for drainage concrete base courses Issue 1996 (no.: 827)

**** Frost protection classifications Germany

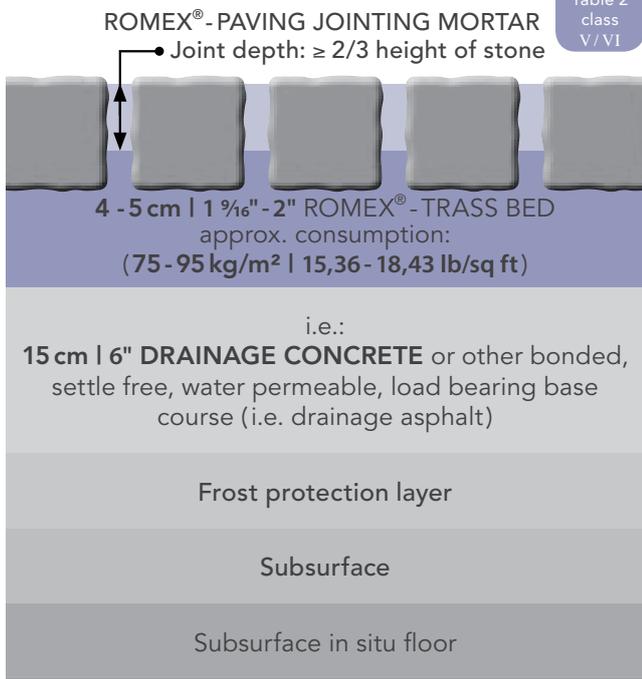
Pedestrian loads* (Patios and footpaths)



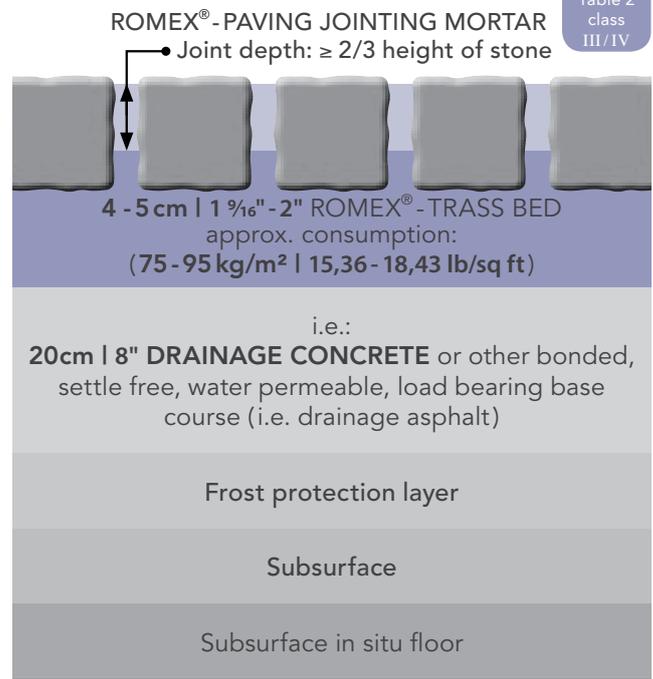
Traffic loads up to 7,5t* (Paved stone surfaces around private homes)



Traffic loads - building classification V/VI**



Traffic loads - building classification III/IV**



Pedestrian loads: Depending on type of paving stone, a gap remains between joint and bed. For cost reasons, this can be filled with a filter stable, water permeable, firm and shrinkage free filler material, i.e. a high quality sand-gravel mixture or if the joints are wide enough, with ROMEX® TRASS BED (sweep it dry into the joints to the minimum jointing depth and then immediately clean the paved stone surface with a fine water jet spray). Alternatively, ROMEX® paving jointing mortar can be worked into the joint completely.

* The construction variations are based on ROMEX® experiential values and the current level of ROMEX® Technology. These contain the ROMEX® system guarantee RSG-5. Please ask us for our detailed system guarantee conditions!

** The construction variations are based on the current issues of the valid leaflets and guidelines for bonded construction methods. Issue 03/2010 – We reserve the right to make changes.