



## ISATEC® - FLEX

### Tough elastic special mortar

ISATEC® - FLEX is a viscoplastic, standard-compliant and water-permeable 2-component special grout with optimal functional properties. The special joint mortar also accommodates the movements of the covering that occur in unbound construction. Due to the high level of flank adhesion, flank cracks are virtually avoided. ISATEC® - FLEX is suitable for public areas with medium traffic loads. To protect areas subject to particularly heavy traffic and to prevent displacement the joint is installed in combination with the displacement protection ISATEC® - STOP is installed. It is the first and only standard-compliant viscoplastic grout on the market. Due to its maximum of 9.9 %, the material can be installed in bound and unbound construction method.



### Properties

- for joint widths from 5 mm | 1/4"
- for joint depths 3 cm | 1 1/4"
- for unbound construction
- in combination with ISATEC® - STOP up to Bk3,2 (RSt0)
- can be applied during drizzle
- frost and de-icing salt resistant
- water permeable
- no cement haze
- resistant to vacuum sweepers

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### APPLICATION

**Construction site requirements:** The foundation needs to be prepared according to the expected traffic loads. Regulations and leaflets regarding construction of paved stone surfaces should be heeded. Future loads must not cause the surface to settle or loosen stones. The bedding and jointing material should ideally consist of a mineral mixture 0/8 mm crushed sand-chip mixture (hard stone). It should be certified and comply with the standards. If bedding and joint material have different grading curves, filter stability must be ensured. Deviating grading curves must be declared and confirmed separately by the contractor. **Ideally, you would use ROMEX® Trass-Bed products** as well as the ROMEX® SYSTEM-GUARANTEE (RSG). For optimum application it is recommended using ROMEX® application tools

**Preparation:** Clean out joints to a depth of at least 30 mm | 1 1/4" (in case of traffic loads 1/3 of stone height, minimum joint width 5 mm | 1/4"). The surface to be joint-fixed should be cleaned of all impurities before work commences. Adjoining surfaces that are not to be joint-fixed are taped off.

**Pre-wet:** Pre-wet the surface. Porous surfaces as well as higher surface temperatures, require more intense pre-wetting.

**Mixing:** Open the bucket, open bottles within and pour the contents completely into the filler material component. In order to fully use the contents of the bottle, both bottles should be rinsed with water. To do this, fill up the two previously emptied resin/hardener bottles with 100 ml | 0.025 gal of water, close, shake vigorously and add the contents of the bottle to the mixture. Start the mixing process. Do not add water! Total mixing time: at least 6 minutes. Use professional agitator or rotary-drum mixer / compulsory mixer.

**Application:** Apply the mixed pavement jointing mortar onto the well moistened surface and work it carefully into the joints using a squeegee/rubber slider. The mortar is poured out at three or four spots within the jointing area in order to make best use of the fluidity of the pavement jointing mortar. If the ready mixed mortar is not used up straight away, before continuing with application and remaining within the stated application time, mix the remaining mortar through again briefly to ensure it has optimum flow capability. **Tools and work shoes should be regularly cleaned with a water spray during jointing, to avoid impurities by binding agent and footprints on the stone surface.**

**Final cleaning:** After approx. 10-15 minutes the excess mortar on the surface of the stones can be swept off carefully with a large, coarse broom. Then use a soft, hair broom to do a final cleaning until all residual mortar has been removed from the surface. Chamfered edges on slabs and clinker surfaces must be exposed, as sufficient adhesion in this area cannot be guaranteed. The correct moment for sweeping, is when white smears no longer form on the stone surface during sweeping. Sweeping should be done diagonally to the joint. Do not reuse swept off material.

**Subsequent treatment:** Rain protection is not necessary during drizzle. In case of permanent or heavy rain, the freshly jointed surface should be protected for 12-24 hours. Do not put the rain protection directly onto the surface, to ensure air circulation.

**Important note - resin film:** During the initial period a very thin film of epoxy resin remains on the stone surface and intensifies the colour of the stone and protects it from dirt. The resin film is temporary and will disappear over time due to weathering and abrasion. A resin film does not constitute an "application fault" and the quality of the surface is not compromised in any way. In case of uncertainty, a sample surface should be tested before the entire jointing is done. For further information please take note of the ROMEX® compendium.

### TECHNICAL DATA

System		2-component special mortar   flexible jointing mortar	
Deflection at breaking load	11,8 mm	DIN EN 1015-11	
Bending tensile strength	1,28 N/mm <sup>2</sup>	DIN EN 1015-11	
Centric tensile strength	0,44 N/mm <sup>2</sup>	DIN EN 1015-12	
Path to maximum strength	15,8 mm	DIN EN 1015-12	
Max. expansion	9,9 %	DIN EN 1015-12	
Weathering rate according to CDF test	25 g/m <sup>2</sup>	DIN EN 12 390-9   M FPgeb	
Water permeability coefficient	6,6 × 10 <sup>-5</sup> m/s	FGSV-Merkblatt ALP Pgeb   BAW-Merkblatt	
Static E-module	14 N/mm <sup>2</sup>	DIN EN 13 412	
Hard mortar raw density	1.407 kg/dm <sup>3</sup>	DIN EN 1015-10	
Application time at 20 °C   68 °F	20-30 minutes	ROMEX®-norm 04	
Application temperature	> 7 °C up to max. 30 °C   > 44.6 °F up to max. 86 °F At lower temperatures slow hardening, At high temperatures quick hardening		
Re-opening of surface at 20 °C   68 °F	after 24 hours can be walked on, after 7 days fully load bearing		
Storage life	12 months		
Storage	frostfree and dry		

Consumption table in kg/m <sup>2</sup>   lb/sq ft - Basis of calculation: joint depth Ø 30 mm   1 1/4"						
Joint width	Stone size	80 × 40 cm 31 1/2" × 15 3/4"	60 × 60 cm 23 1/2" × 23 1/2"	32 × 24 cm 12 1/2" × 9 1/2"	24 × 16 cm 9 1/2" × 6 1/4"	9 × 11 cm 3 5/8" × 3 5/8"
	5 mm   1/4" (min.)	0,8 kg 1.9 lbs	0,7 kg 1.4 lbs	1,5 kg 3.4 lbs	2,1 kg 4.6 lbs	3,8 kg 8.3 lbs
	10 mm   3/8"	1,5 kg 3.4 lbs	1,3 kg 2.9 lbs	2,8 kg 6.2 lbs	3,9 kg 8.6 lbs	6,9 kg 15.2 lbs



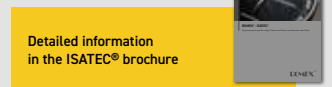
#### GENERAL NOTES

**Limitation of use, use category and load classes**  
Indicates the load-bearing capacity of a substructure and superstructure manufactured according to German standards in accordance with RStO 12, ZTV-Wegebau, DIN 18318. These are terms from German standards, regulations and guidelines for road construction, civil engineering and pavement construction.

**Filler materials**  
All filler materials are natural products which are subject to natural colour deviations.

**Water permeability coefficient**  
Water permeable according to „Leaflet on surfaces that allow for seepage“ (MVV), Issue 2013.

**GENERAL NOTES**  
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