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DICHTSTOFFE

644 Granit Kleber (Granite Adhesive)

- Basis: 1 component hybrid adhesive – silane terminated polymers
- Shore-A-hardness: 60 (ISO 868)
- Skin over time: approx. 12 min. (23°C/50 % relative humidity)
- E-modulus σ_{50} (DIN 53504-S2): 0.31 N/mm²
- E-modulus σ_{100} (DIN 53504-S2): 0.47 N/mm²
- Elongation at break (DIN 53504-S2): 350 %
- Tear strength (ASTM D 624): 13.0 N/mm
- Temperature resistance: - 30°C to + 90°C (permanent)
- Density at 25°C: 1.522 g/cm³ DIN 52451
- Consistency: sag-resistant ISO 7390, profile U20
- Packaging: 310ml-cartridges
- Colours: grey
- Storage life: 12 months in original package in a cool and dry place

Characteristics

644 GRANIT KLEBER is characterised by excellent adhesion to a wide variety of substrates such as stone, ceramics, many different types of natural stone, and by excellent mechanical properties. 644 GRANIT KLEBER is a low-odour adhesive free from silicone, isocyanates and migratory components which often cause discolouration, formation of spots etc. particularly in natural stone. Highly weather- and ageing-resistant.

Application

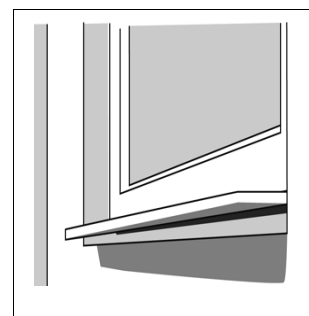
644 GRANIT KLEBER is suitable for a wide variety of applications, e.g. gluing window sills, stairs, ceramics, etc. Extraordinary adhesion to a variety of substrates permits joining or gluing the most different materials **both indoors and outdoors**. 644 GRANIT KLEBER can also be used for gluing full areas provided that at least one side of the substrates has a low degree of moisture (dew moisture) which operates as a catalyst for the system.

Limitations of application

When sealing or gluing joints with concrete the edges must be free from impurities. Furthermore, the alkalinity of the concrete should not be too high. At a pH >9 we recommend to apply the alkali-proof "160 Primer". 644 GRANIT KLEBER does not adhere to polyolefins and Teflon. 644 GRANIT KLEBER has been developed exclusively for gluing natural stone. Use our product "440 Naturstein" for sealing edge joints. Before using the product for swimming pools or saunas get in touch with our application engineering department. The adhesive is not suitable for permanently wet joints.

Processing

Before applying 644 GRANIT KLEBER the materials to be sealed must be solid and free from dust, grease and oil. Compatibility with different coats such as paint or enamel coats, plastics, etc. must be tested prior to application or the sealant must be known to be compatible with the respective materials. 644 GRANIT KLEBER adheres perfectly to a wide variety of substrates. For optimum adhesion particularly to absorbent/porous and mainly alkaline substrates we recommend to apply a primer. Before gluing natural stone apply the insulating film forming primer "180 Sperrprimer" (to be applied once or twice). Take into account the open time of the primer, and subsequently apply the adhesive in beads to one side of the substrates and glue within the skin over time. Apply the product by means of a manual press or compressed air





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press. The curing speed can be enhanced by adding moisture and increasing the temperature.

Our adhesive "644 GRANIT KLEBER" has been tested with the following types of natural stone without any undesired effects on the stone (such as formation of grease stains, spots, etc.) being detected during laboratory tests or inspections:

• Alta Quarzit	• Azul Bahia
• Azul Imperial	• Bahama Blue
• Belgisch Granit	• Bianco Carrara
• Bianco Carrara Classico	• Blue Black
• Botticino	• Botticino Classico
• Cafe Imperial	• Daino Reale
• Estremoz	• Estremoz Extra
• Hartberger Granite	• Impala Scuro
• Imperial Green	• Juparana Classico Rio
• Labrador Blue	• Lilla Gerais
• Mahogany Dakota	• Multicolor Green
• Multicolor Red India	• Mustang Black
• Napoleon Grand Melage	• Nero Assoluto India
• New Imperial Red	• Orissa Blue
• Padang G614	• Padang TG41
• Padang TG48 Rosa Beta	• Perlato Royal
• Porto Branco	• Porto Rosa
• Porto Schiefer	• Rosa Bellissimo
• Rosso Asiago	• Rosso Bilbao
• Star Galaxy	• Statuario Venato
• Stone Wood	• Tan Brown
• Tiger Red	• Trani Fiorito
• Untersberger Forelle	• Verde San Francisco
• Verde St. Tropez	• Viscount White

The results obtained are laboratory results. In view of the specific characteristics of natural stone we recommend to conduct preliminary tests in any case, and to use the insulating film forming primer "180 Sperrprimer". Natural stone which has been exposed to harsh weather conditions (such as frost, significant temperature fluctuations, etc.) or environmental effects for a prolonged period of time before being glued may show poor results.

Safety advice

Consult our current EC-safety data sheet. Our data sheets can be downloaded from our website www.ramsauer.at at any time.



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Advice for application

Ensure good ventilation during processing and curing. In view of the large number of factors which may affect processing and application the user must always try the specific application in an experiment before using the product. Take into account the expiry date of the product. The curing time increases with the thickness of the layer. Before using the 1-component product in layers with a thickness of more than 15 mm get in touch with our application engineering department. Avoid direct contact with bituminous materials and materials releasing plasticisers, such as butyl, EPDM, neoprene, insulting coats, etc. Storage and/or transportation of products at increased temperature/air humidity for a prolonged period of time (several weeks) may result in a reduction of storage life and/or changes of characteristics of the product. Extreme temperature fluctuations, repeated contact with water, high elongation and shearing forces, the effects of weather etc. place high demands on elastic glue joints. Not suitable for gluing in permanently wet areas.

Liability for defects

The information provided including but not limited to the proposals for processing and using our products are based on our knowledge and experience, usually at the time of going into print. The results of work may deviate from this information depending on the specific circumstances, in particular with respect to substrates, processing and environmental conditions. Therefore, neither this information nor any oral counselling shall constitute warranty or give rise to any liability on whatever legal ground for any specific result of work, unless we acted intentionally or by gross negligence. Ramsauer warrants that its products will have the technical characteristics according to the Technical Data Sheets up to their expiry date. Product users must consult the latest data sheet which is available upon request. Our current General Terms and Conditions apply which are available for download on our website www.ramsauer.at at any time.