

620 KONSTRUKTIONS KLEBER RAPID (Construction adhesive)

Solvent-free 1-component polyurethane adhesive curing with air humidity

- Colour: beige
- Minimum processing temperature: +10°C
- Open time at +20°C/50% relative humidity: approx. 5 min.
- After spraying water onto the product: approx. 2 min.
- Pressing time: +20°C / 50% relative humidity: appr ox. 15 min.
- Specific weight: approx. 1.50 g/cm³
- Consumption: 150 300 g/m², according to application
- Curing time 2.5mm bead (+20°C/50 % relative humidit y): 24 hours
- Temperature resistance: -30°C to + 140°C (permane nt)
- Storage life: 12 months in a dry place
- Packaging: 310ml cartridges, 20 units per cardboard box

Characteristics

620 KONSTRUKTIONS KLEBER RAPID cures under the influence of humidity forming a tough and elastic film. The humidity of the ambient air or the moisture contained in the parts joined may be sufficient for this purpose. However, normally moisture is added by spraying water. The effects of temperature and humidity on the strength of completely cured joints must be tested for certain applications. High humidity and high temperatures speed up curing. Therefore, they have an effect on the storage life, open time and curing time of the adhesive. Consequently, the times stated in this data sheet serve for guidance only and may vary according to the prevailing conditions. After curing 620 KONSTRUKTIONS KLEBER RAPID can be ground and covered with paint coats.

Application

620 KONSTRUKTIONS KLEBER RAPID is suitable for a wide variety of glue joints in the construction and installation sectors. The adhesive adheres very well to pre-treated metals such as galvanised steel, primed steel, anodised aluminium, as well as duropolastics, PS, GF-polyester, rigid PVC, ABS, wood and cement bound materials.

Adhesion testing is imperative before application in production taking into account the wide variety of available materials and substrates and possible differences in adhesion behaviour. Suitable for gluing natural stone when applied properly.

Processing

620 KONSTRUKTIONS KLEBER RAPID is applied to one side of the substrate. The substrate must be solid and free from separating agents, dust, grease and oil.

In order to speed up curing and to be more independent of natural fluctuations of air humidity in most cases water is sprayed finely onto the adhesive film after application, or in specific cases on the substrate side not covered with adhesive.

The parts can be joined and pressed immediately after applying the adhesive and spraying water. This must be done within the open time. The parts must be kept fixed under pressure ensuring that the adherent surfaces remain in immediate contact until the adhesive has cured. The amount of pressure required and the pressing behaviour are largely determined by the type and size of parts joined since the adhesive itself does not require any pressure for



curing. The pressure applied to fix the parts serves exclusively for keeping them in contact with each other.

Pressing times are highly dependent on temperature and humidity. Generally, after the pressing time the strength of the joint is sufficient to permit subsequent work on the parts. Final strength will be reached only after a few days.

Special advice

During the curing reaction carbon dioxide is formed causing more or less strong foaming of the adhesive depending on the quantity applied, type of joint, temperature and pressure. In this way the joint is filled. This behaviour is desired in many applications and it is a particular advantage of this adhesive. However, in some specific cases foaming may be a disadvantage or even rule out using this adhesive.

Gluing of aluminium: Suitable for chemically pre-treated or enamel coated surfaces only. In case of blank aluminium it is impossible to achieve durable and ageing-resistant glue joints without adequate priming of adherent surfaces. When gluing materials of different thermal elongation it is imperative to assess long term behaviour in particular if the materials are exposed to changing temperatures.

When gluing massive wood the pressing power should be > 1 $\ensuremath{N/mm^2}$ if possible.

When gluing open-pore core materials to each other the foam forming in the glue joint normally penetrates the substrate independently of the processing viscosity. In case of EPS-foam (styrofoam) this is true only as long as the adhesive has low processing viscosity. In case of higher viscosity the foam does not penetrate the substrate evenly, and there is the danger of formation of visible bulges in the cover layer. When gluing extruded polystyrene foam or PUR-rigid foam onto tight materials such as sheet aluminium there is generally the danger of formation of bulges caused by the foaming adhesive since it cannot expand freely. This can be avoided by providing ventilation slots which can be produced by cutting 1-2 mm deep saw slots in the rigid foam.

Limitations of application

In case of poor adhesion the substrate must be primed. It is recommended to make a second adhesion test after priming. The product is not suitable for tarry and bituminous substrates. Not suitable for gluing mirrors nor for the construction of aquariums and terrariums. Before using the sealant the user must make sure that it is compatible with all building materials and substances with which it will get in contact. With respect to any building materials which will be used subsequently close to the adhesive/sealant it is imperative to make sure in advance that their ingredients and/or cleavage products will not affect or modify the sealant. In case of UV-exposure there is a risk of discoloration. Not suitable for PE, PP, PA, PTFE, and substrates containing oil, wax, and bitumen, and any similar substrates.

Advice for application

Ensure sufficient 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. 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. Cured adhesive can be removed by mechanical means only.

Safety advice

Refer to our current EC Data Sheet. Data sheets are available at any time on our website **www.ramsauer.at**.



Liability for defects

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