

## RECKLI® Construction Resin EP RECKLI® Construction Resin EP “Rapid”

**solvent-free, transparent, two-component liquid resin on epoxy base**

### Properties

RECKLI Construction Resin EP is a universally applicable liquid resin with a ratio of 2 parts base solution and one part hardener according to weight, not volume. We offer two types of hardener with a different reactivity but with nearly the same properties.

RECKLI Construction Resin EP can be mixed with different oven-dry fillers. This will produce, according to the percentage of resin, mortar mixings, coatings or fillers with excellent adhesion on usual surfaces. A special field of application is producing decorative floorings with quartz sand in offices, stores, sales and exhibition rooms. If exposed to UV-Light the resin has a slight yellowing effect without affecting the technical properties.

### Application

Primer:	as primer for RECKLI-Coating-Systems, oven-dry quartz sand 0.5-1 mm is to be sprinkled into the fresh priming
Adhesive/Filler:	Mixing with quartz sand, quartz powder, limestone powder and RECKLI Standardizer 100
Decorative floor toppings:	Mixing with coloured or natural quartz grains
Bonding Layer:	Pure RECKLI Construction Resin EP between old and new concrete
Compounds:	Mixing with quartz sand or limestone powder
Plastic concrete:	Mixing with quartz sand to get wear resistant floor toppings

### Ground level

Please see our separate pamphlet „General Surface Pretreatment Advices when using One- or Two-Component RECKLI-Resins”.

### Processing

Please see our separate pamphlet „General Processing Advices for RECKLI-Two-Component Resins”.

### Technical data

Mixing ratio by weight:	2 parts base solution 1 part hardener or hardener "Rapid"
Viscosity:	appr. 1000-1200 mPa.s
Potlife (200-g-mixture at +21 ° C):	40-50 minutes 15-20 minutes with hardener type "Rapid"
Shore D:	70-75
Hardness given by the dynamic indentation test:	70-75 N/mm <sup>2</sup> after 14 days
Dimensional stability under heat according to Martens:	+40 ° C
Temperature resistance 7 days, +100 ° C recirculated air:	resistant
Working temperature:	+10 ° C to +30 ° C
Earliest loading depending to temperature:	24-48 hrs
Full mechanical and chemical loading:	after 10-14 days

These data are typical guide values. They are not destined for the generation of specifications.

Values of compressive strength and bending tension according to DIN 1164 (mixing with quartz sand):

are available on request or will be tested with the filler expected to use.

### Cleaning of equipment

RECKLI Epoxy Cleaner is suitable for cleaning the tools. Simple laying of the tools into a container with RECKLI Epoxy Cleaner is not sufficient. A thorough cleaning process is necessary.

### Drum sizes

Hardener and base solution will be supplied in separate drums:  
5-kg-base solution and 2.5-kg-hardener or hardener "Rapid"  
10-kg-base solution and 5.0-kg-hardener or hardener "Rapid"

### Storage

Unopened drums are storable for 6 months after delivery date in closed stores at a temperature of approx. +18 ° C.

Please attend also our separate pamphlet "General Processing Advices for RECKLI-Two-Component Resins".

### Safety

This pamphlet is intended solely as an application directive. It does not claim to be binding and valid for all modes of application. We recommend the carrying out of a preliminary test application relevant to full scale application every time.

This pamphlet replaces all hitherto published pamphlets concerning RECKLI Construction Resin EP and RECKLI Construction Resin EP "Rapid" these no longer being valid.

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- Application:** Binder for decorative stone carpets
- Type of quartz sand:**
- colour: natural or coloured
  - sizes: 1-2 mm, 2-3mm, 3-4 mm
- Structure of coating:**
- prepared foundation
  - 1) priming with RECKLI Construction Resin EP, sprinkling with sand, size 0.5-1mm
  - 2) application of the quartz sand/resin mixture
  - 3) final sealing with Construction Resin EP

These works should be made in a 24-h-rhythm (also depending on the temperature)

- Dosage:**
- 1) 100,0 kg quartz sand 1-2 mm  
+10,0 kg RECKLI Construction Resin EP
  - 2) 100,0 kg quartz sand 2-3 mm or 3-4 mm  
+7,5 kg RECKLI Construction Resin EP

The thickness of the coat is appr. 4-8 mm according to the grain size. First loading after 2-3 days, full mechanical loading after 10-14 days, depending on the temperature.

**Average compressive and bending tension strength after 14 days at room temperature +10° C:**

Grain size	Resin Dosage %	Density g/cm <sup>3</sup>	Compressive strength N/mm <sup>2</sup>	Bending tension strength N/mm <sup>2</sup>
1-2 mm	10,0	1,66	approx. 24	approx. 9,2
2-3 mm	7,5	1,64	approx. 21	approx. 8,0
3-4 mm	7,5	1,62	approx. 20	approx. 7,5

- Consumption:** to get a thickness of approx. 6 mm
- 1) Primer: approx. 300 - 500 g Construction Resin EP
  - 2) Quartz size 2-3 mm approx. 9,3 kg  
Construction Resin EP 0,7 kg
  - 3) Sealant approx. 0,3 kg Construction Resin EP

Total consumption of resin per m<sup>2</sup> = 1.4 kg

Hardness process according to DIN 1164 at room temperature +20° C

Mixing ratio: Sand 0.5 – 1.0 mm  
+ 10% Construction Resin EP

Age	Density g/cm <sup>3</sup>	Compressive strength N/mm <sup>2</sup>	Breaking load KN	Bending tension N/mm <sup>2</sup>
1 day	1,75	8,0	not measurable	
3 days	1,76	22,0	4,2	9,8
7 days	1,81	28,5	4,9	11,5
14 days	1,75	32,0	5,1	11,9
21 days	1,76	33,0	5,1	11,9
28 days	1,76	33,0	5,2	12,2

Hardness process according to DIN 1164 at room temperature +20° C

Mixing ratio: Sand 0 - 3 mm  
+ 10% Construction Resin EP

Age	Density g/cm <sup>3</sup>	Compressive strength N/mm <sup>2</sup>	Breaking load KN	Bending tension N/mm <sup>2</sup>
1 day	1,87	11,0	not measurable	
3 days	1,85	27,0	4,9	11,5
7 days	1,85	31,6	5,2	12,2
14 days	1,87	33,5	5,3	11,4
21 days	1,86	34,0	5,7	13,3
28 days	1,84	35,0	5,7	13,3