

# Rapid Epoxy Case Study

## Cracked Mortar and Pestle Repair

A high strength, permanent repair to a granite pestle cracked into two parts saves an owner the grind of buying a new mortar and pestle for their kitchen



The pestle had cracked into two pieces when dropped

### Defect

The granite pestle had been cracked into two when accidentally dropped onto a granite kitchen worktop. This left a break close to the base.

As the owner was fond of the pestle, they wanted to repair it rather than buy a replacement. They needed an adhesive capable of bonding the parts back together, and which could withstand the rigour the pestle went through when grinding ingredients.

### Solution

Traditional superglue would not have been strong enough, so an epoxy adhesive was used to form a high-performance, structurally engineered bond.

**Rapid 5 Minute** was chosen for its fast cure time.

The resin and hardener were extracted onto a piece of cardboard and mixed with a spatula.

An even mix was achieved after 30 seconds and a thin layer of epoxy applied to the break on the top half of the pestle. The bottom part was held upright by a piece of rubber, and the two parts pressed firmly together by the owner.

After five minutes, bonding had begun to take effect. The owner no longer needed to press the parts together, instead leaving the pestle undisturbed for 30 minutes for the epoxy to reach maximum properties.

### Result

A full cure was achieved in 24 hours. The pestle could then be used again in the kitchen.

Rapid 5 Minute sets relatively clear, leaving no obvious glue lines or evidence of the crack. Several years later and the pestle still works perfectly.



The bottom section was held in place with rubber. The top section was coated with Rapid 5 Minute



A high strength bond was created by pushing the two parts firmly together



The completed repair left no evidence of the crack