



## **C9 CEMENT - GUIDELINES FOR PREPARATION AND USE**

C9 cement is a general-purpose refractory cement for use up to 1400°C. The cement is air-setting and gives a permanent bond after firing to above 500°C.

### **PREPARATION OF CEMENT**

C9 is supplied as a dry powder that can be stored indefinitely under dry conditions. Once mixed, it will become hard within a few hours, so it is recommended that no more is mixed than can be used within two hours.

For general use, a mix of 280 g of water to 1000 g of powder is recommended. The cement should be well mixed, left to stand for fifteen minutes, then remixed. Initially it may appear too dry, but the consistency will change to a smooth paste after standing. The use of warm water reduces the need for standing. The consistency of the cement can be adjusted if required, by varying the amount of water used.

A skin will slowly form on the surface of any exposed cement. This skin can be stirred in to the cement without any adverse effect.

### **APPLICATION OF CEMENT**

The surfaces to be joined should be dry, clean and free from dust. Apply the C9 liberally to both surfaces, and attach them quickly as possible using normal hand pressure, squeezing out any excess cement. It is important that once the joint is made, it is handled gently until after drying. Any relative movement of the two surfaces will break the joint; once broken, the joint surfaces must be cleaned of cement, and fresh cement applied.

It is recommended that products are dried for at least four hours at 60°C. The cement will dry in lower temperatures, but the time will need to be extended (Three days at 20°C). After drying, the joint will be resistant to moisture in the air. If required, dried joints can be parted by immersing in boiling water.

On firing above 500°C the cement becomes completely resistant to water. Optimum strength is achieved on firing above 1100°C.