

Polyester Resin Anchoring System



The J-LOK® resin in the cartridge is used to anchor bolts to the surrounding strata. This unification of the resin, bolt and strata layers provides the necessary strength and rigidity to prevent sag by acting as a reinforcement which anchors the individual stratified layers of rock into a single high strength beam.

The two-compartment cartridge shown in illustration A above consists of a heat-sealed tube of polyester film clipped at both ends. One compartment contains a dark gray resin; the other, a light gray catalyst. A cross section of the cartridge is shown in illustration B.

A film barrier of heat sealed polyester film prevents migration between the resin and the catalyst to provide optimum shelf life. The excellent chemical resistance of the film minimizes migration from the inside and the absorption of contaminants from the outside.

The lightweight, dimensionally stable casing of film is strong enough to withstand rough handling, but shreds quickly and thoroughly during the installation procedure.

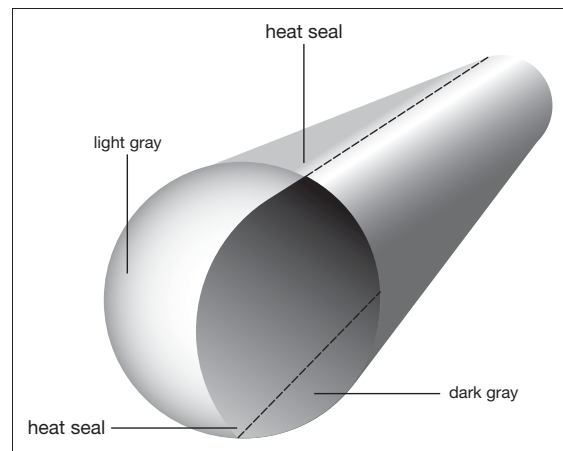
J-LOK is thixotropic and fast setting. This reduces viscosity during insertion of the bolt and permits relatively low installation force and torque. The results are fast installation, rapid achievement of full strength, and a minimum tendency for ungelled resin to drip from the holes during installation.

Storage Recommendations

For maximum shelf life, J-LOK cartridges should be stored away from direct sunlight in a reasonably cool, well-ventilated, dry area. Storage life is up to 1 year, depending on ambient temperature conditions. Under adverse conditions shelf-life is reduced. To ensure proper storage, the product should not be subjected to temperatures in excess of 90°F for prolonged periods. Storage is recommended under cover, on original pallets with adequate ventilation. If stored in trailers in hot weather, door should be left ajar or a sun screen erected over the trailer. Conversely, while cold storage does not adversely affect the shelf-life of J-LOK, it should be warmed to a range of 50°–60°F before using to assure gel times within the specified range (see Figure 2).

The time required for cases of J-LOK to warm or cool to ambient temperature is dependent on both the initial temperature and how the cases are stacked. Where the initial temperature is anywhere between 25° and 85°F, cases will come within 5° of ambient temperature in 48 hours when stacked in single columns with 4 sides of each case exposed to the air. Multiple columns should be separated by at least 2" to assist air circulation between columns.

The Cartridge



Cross Section

Advantages

The proprietary J-LOK® package has a distinct advantage over other resin systems due to:

- High catalyst/resin ratio
- Uniform installation time
- Mixing efficiency

Fig. 2. Gel time

