

Polyurethane Grouting

PRE-CONSTRUCTION PIERS, SINKHOLE REPAIR,
SOIL & STRUCTURAL STABILIZATION

Polyurethane Grouting

Two polyurethane liquid components are mixed and injected under pressure below the area or structure being repaired. The two liquids react with each other, expand and harden, like the foam you get in a can to seal around windows. Our polyurethane grouts stay a liquid for a few seconds before expanding. This helps them spread out from the exact spot they're injected, but then get harder much faster, and can exert much more force during expansion. The grouts we use are specially formulated to be very strong and long-lasting in contact with the ground.

Technical Details

The polyurethane grout is injected under low pressure through or adjacent to a slab of foundation. The grout then expands to fill the crack or void. Many polyurethane grout techniques are available with variations in viscosity, reaction time, reaction with water, expansion characteristic and flexibility of the reacted grout. Polyurethane grouts can be single or multi-component, and can require a reactant or react when encountering water. It is important to select the correct grout for each application.

| PU grouting materials can be divided according to their chemistry to thee main groups: | | |
|--|--|--|
| Two-component (PU) organic resins: | One-component organic resins: | Two-component organic-mineral resin (OMR): |
| Component A - Polyol in mixture (polyetherpolyol, catalysts, additives) | React with moisture present in the environment or construction and form and organic resin (material is on the basis of prepolymer MDI) | Component A - Polysiliceous acid (natrium water glass, catalyst, and additives) |
| Component B - Isocyanates in mixture (methylene diphenyl diisocyanate [MDI], homologes, isomeres) | | Component B - Isocyanates (MDI, homologes, isomeres) |



HeliconCommercial.com