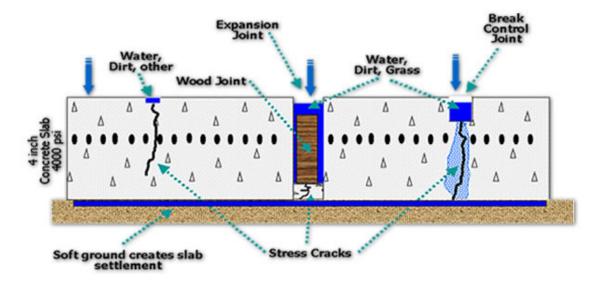
## WOHL COATINGS EXPANSION JOINT FAILURE & REPAIR



There are two types of joints in concrete slabs, **Expansion Joints** and **Controlled Crack Joints**. Every concrete slab inside or outside above eight feet by eight feet is required to have joints.

**Expansion Joints** provides space between concrete slabs. The space serves as a buffer for expansion on hot days and compression in cold days. Usually these Control Joints are installed during the initial installation of the concrete. Most control Joints are made of wood or some soft material so they can move with the expansion and compression of the concrete. However the wood and expansion joint material quickly deteriorates and allows water under the slab which causes more cracks in the main slab. Usually Control Joints vary in size from half-inch to an inch in width (sometime a full 2x4 width) and three to four inches in depth. A slab without control joints will crack and reduce the life of the concrete slab. Control joints also serve as Controlled Crack Joints as the slab settles with time. Note water leakage causes more severe settling of the slab.

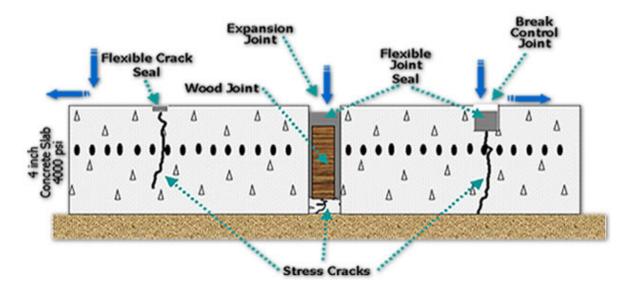
**Controlled Crack Joints** control cracking as the slab settles with time. Usually these Joints are cut into the slab after the concrete hardens. Control Joints vary in size from one-eighth inch to one-quarter inch in width and half inch in depth. A slab without Crack Joints will crack in random patterns and will reduce the life of the concrete slab. However the control joints are usually not installed deep enough to insure cracking along the joint and cracks occur randomly.

Both type of joints with time will accumulate dirt, salt, allow grass or weeds to grow, and allow water to filter under the slab, etc. Water under the slab accelerates the settling of the concrete slab creating uneven concrete surfaces and cracks.

**WOHL Flexible Joint and Crack Sealer** allows the joints to do their intended job, and at the same time prevents water penetration and any other foreign matter therefore extending the life of the slab. Pictures of sealed joints

The graphic bellow illustrates how WOHL Flexible Joint sealer works.

FIGURE 1. WOHL REPAIR



## WOHL recommends:

- Concrete in good condition but expansion joints failing. Clean out joints and cracks. For minor stress cracks seal with commercial grade polyurethane flexible caulk/crack filler. For expansion joints refill with sand or wood ( or coat over existing joint material which acts as a filler only) and finish using a high grade flexible polyurethane caulk. Seal entire concrete surface with water repellent sealer.
- Concrete spalling and some wild structural cracks. Repair hairline cracks as in (1). Repair spalled area using WOHL Shurbond 550 Epoxy Adhesive and Shurbond 100 Polymer Concrete to resurface spalled areas. Resurface with WOHL Concrete Surfacer for best results and uniform appearance. Repair joints as in (1).