



CRAZING ON CONCRETE SURFACES

Crazing is the development of a network of fine random cracks or fissures on the surface of concrete or mortar caused by shrinkage of the surface layer. The cracks are rarely more than 1/8" deep and usually appear within a few days of the concrete's placement. They do not affect the concrete's structural integrity and rarely lessen its durability or wear resistance, but can be unsightly.

Why Crazing Occurs

- Insufficient curing
- Too wet a concrete mixture
- Poor finishing

What to Do About It

Taking the following precautions can minimize the risk of crazing:

- **Curing.** Improper curing allows the concrete surface to dry too quickly and may result in crazing. Start curing as soon after placement as possible by flooding the surface with water, or covering it with damp burlap and keeping it wet for at least three days. An alternative is to spray the surface with a liquid membrane-curing compound.
- **Concrete.** Use air-entrained concrete with a moderate slump. Air-entrainment refers to the amount of oxygen contained in the concrete mixture. Air-entrainment helps reduce the rate of bleeding of fresh concrete and reduces the likelihood of crazing. Slump refers to the amount of water contained in the concrete. A higher slump concrete may allow the concrete mixture to segregate, resulting in a weak surface layer.
- **Finishing.** Don't begin finishing operations until the concrete is free of surface water. Troweling or bullfloating while there is still bleed water on the surface will produce a high water-cement ratio and weaken the surface layer. Don't sprinkle cement on the surface to dry up bleed water since this concentrates fines on the surface and may result in crazing.

Products Used: Tamms Curing and Sealing Products; Euclid Diamond Clear; Surebond 1370 Epoxy Sealer.