



Crackguard™

Keep it together.

Part of the Performx® series of mixes available from Heidelberg Materials, Crackguard concrete offers a solution to typical drying and shrinkage problems without any special placing or finishing. Ideal for commercial, industrial and residential slabs, Crackguard concrete can provide as much as 60% reduction of shrinkage at 28 days when compared to standard mixes.

Typical applications

- High-performance industrial floors
- Parking garage decks
- Bridge decks
- Toppings and overlays
- Ice arenas and swimming pools
- Containment structures
- Water treatment structures
- Architectural concrete
- Residential slabs

Crackguard concrete is a crack-resistant, low-shrinkage concrete mix that is available in two program levels.

Performance characteristics

Superior finish

- Reduced cracking
- Reduced curling
- Improved appearance
- Increased joint spacing possible

Cost effective

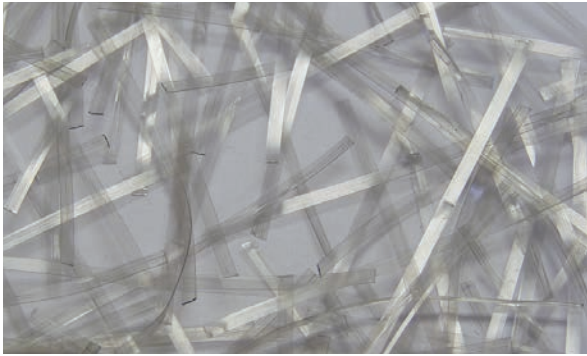
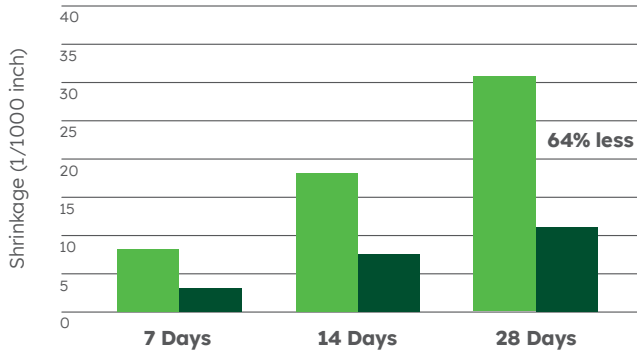
- No special placing or finishing required
- Reduced call-backs
- Provides the opportunity to increase joint spacing, resulting in reduced joint maintenance
- Lower overall lifecycle costs

2 program levels

- Level 1 mixes include an optimized mix design, a controlled water/cement ratio and the addition of a shrinkage-reducing admixture
- Level 2 mixes include an optimized mix design, a controlled water/cement ratio, and the addition of a shrinkage-reducing admixture, plus fibres to further reduce random cracking

Less shrinkage = less cracking

Crackguard shrinkage performance per ASTM C157



As noted in ACI 224-90 control of cracking:

“Cracking of concrete due to drying shrinkage is a subject that has received more attention by architects, engineers and contractors than any other characteristic or property of concrete. It is one of the most serious problems encountered in concrete construction.”

Product specifications

- Various strengths: 20-40 MPa in 28 days
- 20 or 14 mm aggregate
- 80-160 mm slumps (100 mm + slumps achieved with plasticizer)

Shrinking performance

- Complies with CSA A23.1 requirements for low-shrinkage concrete—less than 0.04% when tested in accordance with CSA A23.1 clause 8.8.2

Curing

- Curing Type 3 required: a wet curing period of 7 days at > 10 degrees Celsius

Choose Crackguard Level 2 to further reduce random cracking