Concrete Cracks

The following doc points will illustrate concrete failure and cracks.

- **1. Substrate failure**
  - Cause of concrete sinking in an uneven format. Control and dummy joints should adopt the crack but unfortunately control and dummy joints do not sense movement. They are systematically set and therefore don't always adopt cracks as designed.

- **2. Moisture content**
  - Not enough direct sunlight.
  - A sloppy land
  - Home built in swamp land
  - Moister content can be higher during colder periods

- **3. Cement hydration;**
  - This is caused by the applicator not applying enough water during the initial concrete pour.
  - The dehydration stage causes many little fracture cracks throughout the slab that eventually expand and surface. These cracks surfacing are caused by movement, vibrations and static hydration within the concrete slab.

- **4. Expand & retract theory**
  - Concrete slabs expand during the day and more during the summer time. And retract at night or during the winter. This process continues for 99 years. Once concrete reaches its final cure stage it will not continue to produce any chemical reactions or hydrostatic movement.
  - Land tremors can also cause a concrete slab to fail.

Acknowledgments
It is these reason **no contractor can guarantee** any cracks will not appear.
Repaired cracks may reappear or may surface nearby other cracks.
New concrete slabs do not differentiate the doc points above.
Larger reinforced steel does not alter resistance for concrete cracks.

Our resolutions and recommendations
All cracks, big or small should be repaired with Mega poxy H and followed through with a saw cut. The saw cut is not a guarantee but from our experience concrete will crack at the weakest point. Saw cuts are 2cm in depth and therefore create a weak point. The obvious in concrete cracks are the colour differentiations. (Eg black and grey lines) When we form a new stencil we also colour our saw cuts. This makes the saw cut more invisible and highlights a continuos colour profile to your surface.